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TABLE *of* CONTENTS

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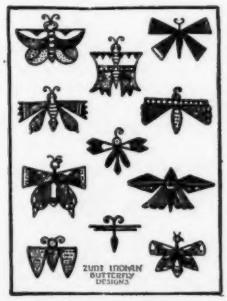

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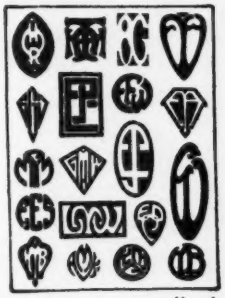

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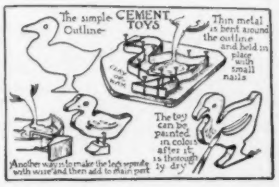

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Considerations in Muscle Function and their Application to Disability Evaluation and Treatment

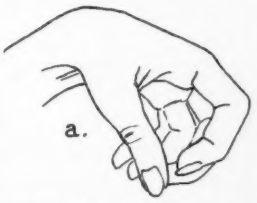
By SUE P. HURT, O.T.R.

CONSIDERATIONS MADE NECESSARY BY TWO-JOINT MUSCLES

1. Restriction

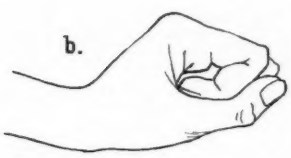
The resting length of a two-joint muscle is insufficient to allow full motion in the direction away from itself simultaneously in both joints over which it passes.

Example: (a) Finger extensors restrict simultaneous flexion in wrist and fingers.



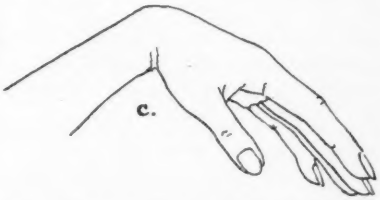
2. Tendon Action

Full motion may be had at either joint upon relaxation at the other. The relaxed joint moves passively in the direction of the two-joint muscle, pulled by the tendon as it becomes stretched over the joint at which full motion is desired. This is known as tendon action.



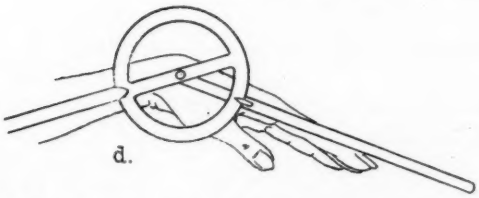
Example: (b) For complete finger flexion, allow wrist to hyperextend.

(c) For complete wrist flexion, allow fingers to extend.



Both motions will take place passively by tendon action of the finger extensors. Omission is purposely made here of synergic action of the wrist.

APPLICATION OF THE ABOVE TO DISABILITY EVALUATION AND TREATMENT



Joint Limitation—(d) In measuring a joint over which a two-joint muscle passes in a position to cause restriction, place the joint not being measured in a position of relaxation.

Loss of Power—(e) In muscle reeducation, avoid restriction by a two-joint muscle on the opposite side by placing the proximal joint in a position which relaxes it.

3. Emergency Function

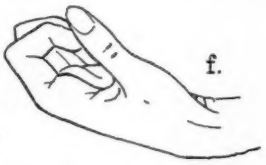
The primary function of a two-joint muscle is on the distal joint. It does not contract, except in emergency function, with intention to move only the proximal joint.
It comes into play at the proximal joint if:

1. Resistance is offered beyond the capacity of the muscles of the proximal joint.
2. The muscles of the proximal joint are paralyzed.
3. Motion is attempted at the proximal joint beyond the exisiting limit.

Thus a two-joint muscle acts in emergency function on the proximal joint when the resistance exceeds the capacity of its prime movers.

Emergency function may be detected by motion at the distal joint.

Example: Finger flexors act to help flex the wrist in the above three emergencies. This may be detected by the beginning of finger flexion. (f)



APPLICATION OF THE ABOVE TO DISABILITY EVALUATION AND TREATMENT

Joint Limitation—In measuring a proximal joint, attempted motion beyond the existing limit brings the two-joint muscles belonging to the distal joint into emergency function, causing motion at the distal joint. This increases the restriction from any two-joint muscle on the opposite side, thus defeating the purpose.

Example: (a) In measuring wrist flexion, attempted motion beyond the existing limit brings into play the finger flexors. As the fingers flex, the restriction of wrist flexion is increased through the tightening of the finger extensors over the wrist.

Loss of Power—In testing or in treating the prime movers of a proximal joint, watch for substitution by emergency function of the two-joint muscles belonging to the distal joint, detected by motion at the distal joint.

Example: (f) In testing or treating wrist flexors, emergency function of finger flexors may be detected by beginning finger flexion.

4. Mechanical Advantage

A two-joint muscle exerts a stronger pull on one joint if it is on a tension over the other. Too much relaxation in the muscle occurs if an attempt is made to shorten it over both joints at one time. Also—when a muscle is being stretched, the chemical processes liberating energy are proceeding at a higher rate—thus better contraction.

APPLICATION OF THE ABOVE TO DISABILITY EVALUATION AND TREATMENT

Loss of Power—In testing or in treating a two-joint muscle, put it at a mechanical advantage by stretching at the proximal joint.

Example: (e) Wrist hyperextended when testing or treating recovering finger flexors.

5. Straight Synergic Action

A muscle having more than one action will perform all of them with each contraction unless prevented by some outside force from performing all but the desired one. Synergists are the means of preventing all but the desired action.

Example: (g) Contraction of the long finger flexors would produce flexion in all of the joints over which their tendons pass if not prevented by synergic action on the posterior surface.

h.

(h) Flexion of the middle and distal joints only with extension of the proximal is made possible by synergic action of the extensor digitorum communis.

(i) Flexion of all three joints of the fingers with extension of the wrist is made possible by synergic action of the wrist extensors.

The strength of synergic contraction is in direct proportion to the primary muscle action.

i.

APPLICATION OF THE ABOVE TO DISABILITY EVALUATION AND TREATMENT

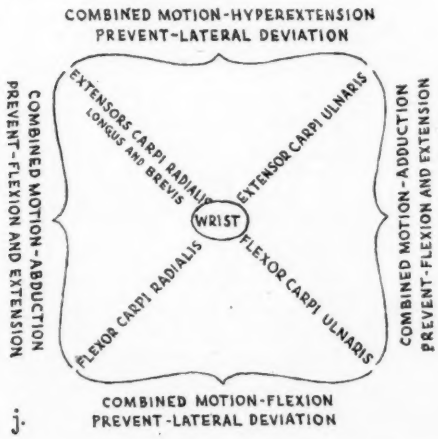
Joint Limitation—In the use of a mallet for wrist mobilization, avoid tight grasp as strong synergic action is a factor in stabilizing the wrist.

Loss of Power—In testing or in treating a two-joint muscle, adequate stabilization of the proximal joint must be maintained by synergic action or a substitute.

A CONSIDERATION MADE NECESSARY BY MULTIPLE ACTION OF ONE MUSCLE ON ONE JOINT

Helping Synergistic Function

Muscles whose primary action is on the same joint may work together for motion in one direction while they are mutually antagonistic for motion in another plane. These may be called helping synergists, since they help to perform the desired movement while acting synergically to prevent undesired movement.



j.

Example: (j) In the wrist the flexor carpi radialis and extensor carpi radialis longus and brevis are antagonistic in their flexor and extensor actions but work together in their combined action of radial deviation.

APPLICATION OF THE ABOVE TO DISABILITY EVALUATION AND TREATMENT

Loss of Power—In testing or treating, watch for deviation which shows imbalance.

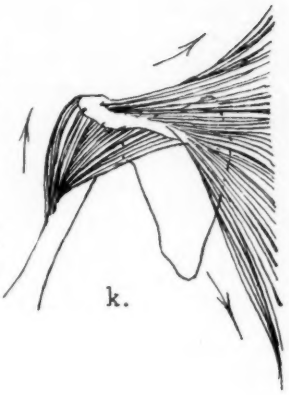
Example: In testing wrist adductors deviation toward flexion shows weakness in the extensor carpi ulnaris.

A CONSIDERATION MADE NECESSARY BECAUSE OF MUSCLE ORIGIN ON LOOSE BONE

Fixation Function

When a muscle contracts, it may produce movement at either its origin or its insertion, depending upon the fixation or lack of same.

Example: Shoulder abductors originate on the scapula and insert on the humerus, their function being to abduct the humerus. The scapula, being a loose bone, needs fixation by other muscles if it is not to be dislodged by the contraction of the shoulder abductors.


k.

APPLICATION OF THE ABOVE TO DISABILITY EVALUATION AND TREATMENT

Loss of Power—In testing or in treating, if fixation muscles are too weak or too strong, the examiner must simulate the normal fixation.

All-Or-None Law

A muscle fibre responds maximally (for its existing state of excitability) to a given stimulus or not at all. (Factors of fatigue and nutrition affect the state of excitability). It follows that the number of fibres of a muscle or muscle group called into play by a stimulus is in direct proportion to the strength of the stimulus.

APPLICATION OF THE ABOVE TO DISABILITY EVALUATION AND TREATMENT

Loss of Power—In testing or in treating, resistance must be in proportion to the existing strength of the muscle if the whole muscle is to work. It must be increased as individual fibres become stronger if all fibres are to continue to work.

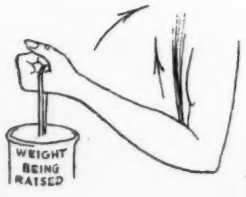
Reciprocal Innervation Theory

Voluntary contraction of a muscle or group is normally accompanied by relaxation of the antagonists.

APPLICATION OF THE ABOVE TO TREATMENT

Joint Limitation—Active stretching of a contracture promotes relaxation in the muscle being stretched. Relaxation is necessary for stretching.

Types of Muscle Contraction



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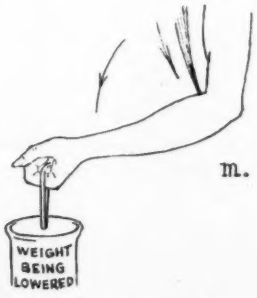
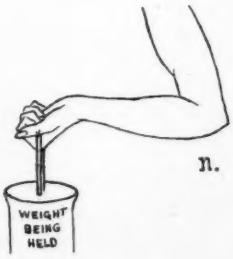


m.



n.

(l) Concentric Contraction—a shortening contraction.

(m) Eccentric contraction—a lengthening contraction. Use of muscles to oppose a movement but not strong enough to stop it, as in lowering a weight.

(n) Static contraction—contraction of muscles to maintain posture or position or to hold a bone in place for another muscle's pull.

APPLICATION OF THE ABOVE TO TREATMENT

Joint Limitation—By the use of concentric contraction the muscles on both sides of the part obtain treatment—one side being stretched, the other strengthened by the effect of the muscles upon each other.

Loss of Power—Concentric and eccentric contraction are less fatiguing since they promote circulation and hence nutrition and removal of waste products. However, static is used for graded tolerance with muscles whose function is static.

Example: Static function of posture muscles.

The Application of Ergography to Disability Evaluation

1. THE NORMAL FATIGUE CURVE

F. A. HELLEBRANDT, M.D., AND HELEN V. SKOWLUND

From the Baruch Center of Physical Medicine, Division of Clinical Research, Medical College of Virginia Richmond, Virginia

Disability evaluation is inseparable from the rational practice of modern Occupational Therapy. It is nowhere more important than in the conduct of that branch of Occupational Therapy which concerns itself with the rehabilitation of those suffering from traumatic lesions, congenital deformities or diseases affecting the neuromuscular and skeletal systems. The term connotes a systematic measurement of abnormalities in functional capacity. That the evaluation of disability shall be maximally objective, is basic to the evolution of a science of Occupational Therapy.

Disability evaluation may be said to have several interrelated objectives. Chief among these is assessment of the physical abilities of the patient prior to the initiation of treatment. This should include measurement of innate capacities as well as learned motor acts, since performance disabilities may be more apparent than real, following trauma, because of a previously existent poor ability to execute movements requiring specified degrees of speed, strength, skill or endurance. Disability evaluation may detect latent capacities of high compensatory usefulness in the planning of a progressive program of physical restoration. The motivation value of well administered tests is recognized by all occupational therapists. With experience in their administration, such tests take on prognostic value, especially when achievement scores are carefully matched against the improvement gradient of the patient under treatment. Among other things, testing expedites the classification of those with like functional disabilities for the purpose of group therapy. Of large economic importance is the use of disability evaluation measures for the determination of the end-point of effective treatment, and for the final assessment of that

residual physical capacity upon which compensation depends. Lastly, but by no means of least importance, is the use of objective criteria of progress as a measure of the efficacy of the prescribed treatment. There can be no science of Occupational Therapy until this becomes common practice in all treatment centers purporting to quicken the recovery of the disabled through the medium of occupational activities.

Methods of evaluating disability fall into three broad categories. *Clinical tests* are based largely on the presence or absence of established diagnostic signs. They are administered by the physician as an integral part of the physical examination and require for their interpretation expert knowledge and the exercise of high degrees of clinical judgment. *Motor ability tests* of many types are used by all occupational therapists. For the most part they measure the skills needed by the severely handicapped to meet the exigencies of normal everyday living, or test the work tolerance of the disabled who have been rendered temporarily unemployable as a result of accident or disease. Few clinical motor ability tests have been formally validated; frequently, they cannot be administered with due regard for the effects of testing conditions upon their reliability. Thus, they are either frankly qualitative or of only grossly quantitative value. Their most effective function has been that of motivation. Progress that can be seen or measured, even roughly, is of inestimable value in encouraging the patient. *Physiological methods of evaluating disability* focus attention on phenomena of a fundamental nature which may help explain why performance disabilities exist. They may be standardized readily to yield valid and reliable quantitative data. The object of this paper is to demonstrate how the ergographic curve of fatigue may be converted into a physiological gauge by which to appraise disability and judge progress.

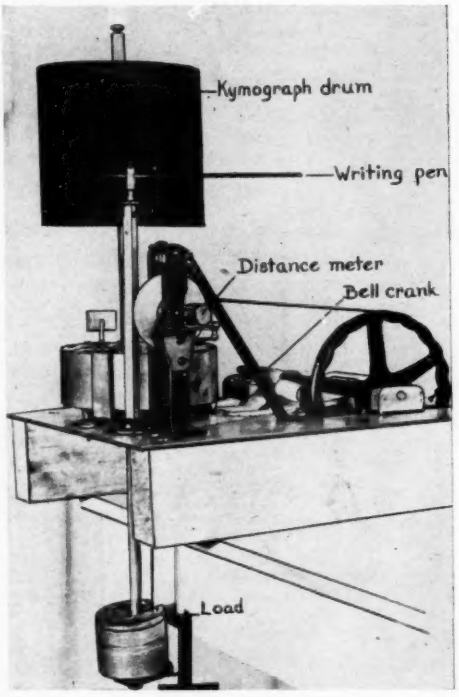


Fig. 1. Kelso finger ergograph arranged to write on smoked paper. The finger being exercised fits under the bell crank. The adjacent digits are placed in restraining stalls fixed on either side of the free space for the moving finger.

Methods

1. *The Selection of a Test Instrument*—The practical ergography of today appears to stem from the fundamental observations of the Italian physiologist Mosso,[1] their extension by the American physiologist Lombard,[2] and their further adaptation to the problems of industry by the French investigator Amar.[3] Ergographs are applicable to the quantitative study of the work capacity of any skeletal muscle group. Devices identical in principle but simpler in design are in use in many clinics. Because of its similarity to as common a clinical tool as the Kanavel Table,[4] the finger ergograph was selected to illustrate the practical utility of this type of instrument, which may be used at one and the same time as a testing tool and therapeutic device.

2. *Description of the Finger Ergograph*—The ergograph used (*Fig.* 1) had been developed by Kelso at the University of Wisconsin in 1942. This instrument gives a pictorial record of the mechanical work done by the finger in lifting a weight repetitively against gravity. The load may be varied ac-

cording to the strength of the patient. The finger pulls against a suitably padded metal bar fastened to the circumference of a wheel. The bell crank thus moves in an arc, lifting the load vertically by means of a cable which passes from the wheel to the weight over a pulley. The angle at which resistance is applied remains constant throughout the full range of motion.

The Kelso ergograph is both indicating and recording. The height of successive lifts is indicated on a distance meter while being simultaneously recorded on the drum of a slowly revolving kymograph. Mechanical work done is calculated by multiplying the load by the total distance through which it was lifted. This is reported in kilogrammeters.

3. *Subjects of the Investigation*—Seven normal healthy adult women, ranging in age from 25 to 45 years, served as subjects for this study. All were familiar with laboratory procedure and several had used the ergograph previously. Environmental testing conditions were good and every attempt was made to schedule all observations on any one subject at approximately the same time of day, thus neutralizing diurnal shifts in work capacity, the influence of meals and variations in previous activity. All subjects were interested in the outcome of the tests and understood the significance of their own records.

4. *Experimental Procedure*—The subject was seated during the exercise with the forearm and hand resting in supination in a horizontal position. The power of the middle finger was subjected to study. The pulling force was applied over the volar aspect of the middle phalanx of the test finger and movement occurred at both the interphalangeal and metacarpophalangeal joints. The remaining fingers were inserted loosely under a restraining brace. No attempt was made to immobilize the wrist or forearm, since this affects the circulation of the parts under study. The motion permitted in contiguous joints was standardized and the subject was given an opportunity to acquire the form desired prior to the onset of systematic testing.

The work conditions for each subject were standardized individually by control of the four following factors: first, the duration of the effort; second, the speed of doing work; third, the rhythm of the exercise; and fourth, the load against which the muscles contracted. Thus, the extent of the repetitive effort was the only variable to be measured. The total work done was performed in a double series of twenty bouts with an intervening rest period of one-half hour. Each individual ergogram consisted of 25 to 40 contractions, depending upon the strength and endurance of the muscle group under study. Thus, each subject made 1000 to 1600 maximal volitional contractions against resistence per experiment. The rest period between bouts was thirty seconds for five subjects, and forty-five seconds for the remaining two. The speed of doing work was one contraction per second. The rhythm was set by an electric metronome giving a visual as well as an auditory signal. The activity was a two-count exercise, with contraction and relaxation equal in duration. The load selected was so heavy that power fell off precipitously in spite of the "all out" nature of the subject's effort. As strength increased with training, the load was made heavier by an increment sufficient to prevent a significant change in the gradient of the fatigue curve.

In toto, 158 experiments were performed, yielding 6,320 ergographic fatigue curves, or ergograms, produced by more than 250,000 voluntary contractions. These were subjected to inspectional analysis to establish the clinically important characteristics of the normal ergographic response to a repetitive performance of exercise. Five of the subjects exercised daily, five times a week. The other two subjects exercised twice weekly.

Results and Their Interpretation

Under the conditions imposed, each of the individual repetitive work bouts established a kymographic fatigue curve, which typically consisted of an initial series of strong contractions, sometimes demonstrating the phenomenon of *treppe*, followed by a gradually decreasing contraction height until the load could no longer be lifted in spite of an unequivocally maximal effort. A brief rest pause between bouts, lasting from 30 to 45 seconds, was associated characteristically with a remarkable recovery in strength. Fifty years ago Lombard was much interested in waves of apparently spontaneous revival of contractile power which

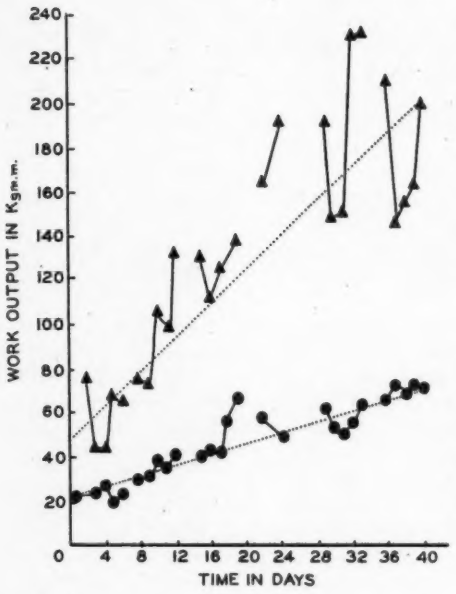


FIGURE 2.

VARIATIONS IN DAILY WORK OUTPUT OF TWO SUBJECTS AND THE SLOPES OF THEIR TRAINING CURVES.

occurred during the course of prolonged ergographic experiments.[5]

When the resisting load approximated the greatest force which could be exerted, the decline in contraction height came very rapidly. With a light load the slope of the fatigue curve was more gradual. Repetitive effort at some as yet undetermined fraction of initial maximal strength was marked by the appearance of a fatigue level. The lighter the load, the higher the fatigue level and the earlier it appears in the series of contractions composing a single work bout. The significance of this seems to have escaped the earlier observers.[6]

Total work done per exercise period was calculated in kilogrammeters. Graphed against time in days, these data show the variations in work output which characterize normal training (*Fig.* 2). All subjects increased in strength and endurance. The trend of improvement in work output was determined by the method of least-squares. The slope of these linear curves ranged from 7.11 to 25.98 for the subjects who exercised daily five days per week, and from 4.26 to 7.92 respectively for the two subjects who exercised twice weekly. Since the frequency of treatment is important clinically, the composite trend of improvement for subjects exercising daily with the exception of Saturday and Sunday was computed and compared with that of those exercising biweekly. The slope gradients were 15.12 and 6.09 respectively. They are illustrated in *Figure* 3.

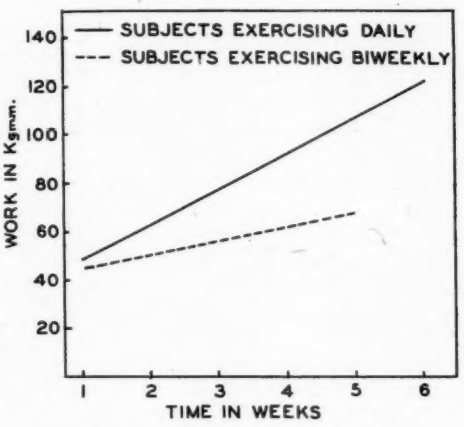


FIGURE 3.

TREND OF IMPROVEMENT IN WORK OUTPUT OF SUBJECTS EXERCISING DAILY AND OF THOSE EXERCISING BIWEEKLY.

Discussion

The variety of ergographs which can be developed is limited only by the ingenuity of the designer. Instruments under construction for clinical trial in this laboratory include grip, wrist, pronation-supination and shoulder ergographs, and an indicating electrodynamic brake upper extremity ergometer. Similar devices may be constructed for the study of the functional capacity of muscle groups of the lower extremities. The selection of the finger ergograph for this series of preliminary observations was appropriate, since hand injuries are responsible for the loss of more working time in industry than the disability of any other anatomical part. Accordingly, exercises for the hand are always a prime concern of the occupational therapist.

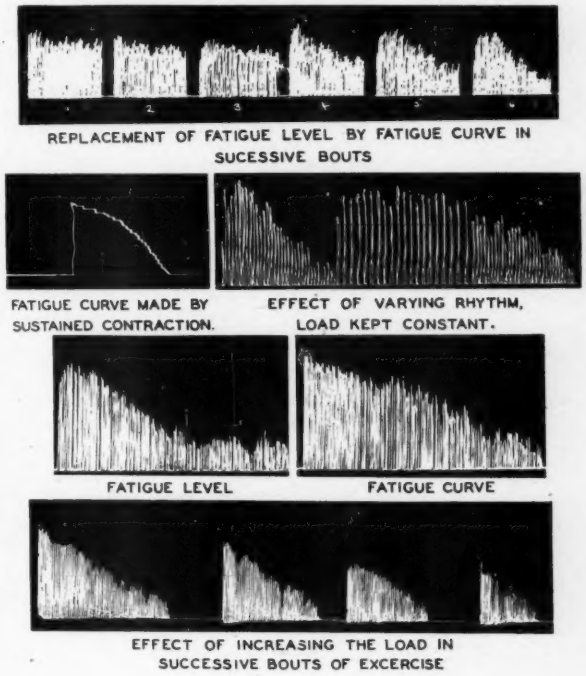


Fig. 4. Kymograms illustrating (from left to right) the change in the character of the ergogram with repetition of an exhaustive bout of work when the load, rate of working and number of contractions are kept constant; when a sustained contraction replaces repetitive effort; when the rate of contraction is varied with the load kept constant; when the load is too light to prevent exercise in the steady state; when the load is sufficiently heavy to produce complete exhaustion without appearance of a fatigue level; when the rate of contraction is kept constant, the duration of the "all out" effort is the independent variable, and the load is increased by equal increments at the termination of each bout. The rest pause between bouts is constant.

The ergograph may be adapted readily to the limitations of clinical vs. laboratory application. The moving lever, actuated by volitional effort, may record on smoked paper or be replaced with an ink-writing capillary pen. The kymogram stroke may be an absolute equivalent of the distance through which the load moved. However, through the use of appropriate levers or pulleys, small movements may be magnified and large movements reduced as desired for convenience in recording on a scale amenable to inclusion of the original records in the patient's case history. If the resistance is measured in kilograms, the distance meter is calibrated in metric units. The total number of lifts per bout or per exercise period may also be indicated automatically by introducing a mechanical or electrodynamic stroke counter.

The character of the fatigue curve may be used as the criterion by which to judge the physiological severity of the exercise. Load, speed, rhythm and duration of effort may be varied independently to suit the changing individual needs of the patient undergoing treatment. *Figure* 4 illustrates the typical response to modifications of some of these variables. The amount of work done per unit of time is the primary determinant of the physiological response elicited by the exercise. It is important to note that this may be augmented in two different ways, either by increase in the load carried, or the speed of doing the prescribed exercise. The uninterrupted maintenance of a sustained contraction against heavy resistance demonstrates a fatigue curve which is strikingly similar in its characteristics to the ergogram yielded by repetitive effort.

The load, the rhythm and the speed of doing work are the most commonly fixed variables in ergographic experiments. The duration of the exercise then becomes the independent variable. However, this may also be standardized, the total distance through which the load is lifted being left as the single unknown in the testing procedure. This is the preferred technique, since the establishment of an objective goal lends itself to more repeat-

able performance than that obtained by an "all out" effort, especially in subjects who have never been inured to the rigors of working volitionally to exhaustion. All in all, the ergograph is an exceedingly flexible device, subserving multiple variations in use, adapted to an individualized and particulate type of problem solving.

Ergograms differ with the susceptibility of the subject to fatigue. They are more or less characteristic for each subject. With practice, coordination improves, and the fatigue curve approaches its asymptote more smoothly and more slowly. As power increases with training, the curve varies in its relation to the initial height of contraction until the total effort is performed in the steady state. Since recovery is then virtually complete between contractions, the activity may be continued indefinitely. Such exercise is of little value when the objective of treatment is augmentation of power. The controllable variables, *load, rhythm* and *duration of effort* should therefore be adjusted frequently during the course of a series of treatments. If correction of deficiency in endurance or staying power is the major therapeutic objective, the load should be lightened. The fatigue curve then falls asymptotically until a fatigue level is reached. Stereotyping is avoided by encouraging the subject to match or exceed his previous record. The ergogram may be made to write in full view of the subject. This provides a continuous visible goal.

The cause of the decline in contraction height is too complex to warrant discussion, being related to central and peripheral innervation, blood supply, the accumulation of inhibiting metabolites, and the configuration of the molecular components of the contractile elements. When the load is heavy, or the rhythm brisk, the work is more or less anarobic in type, and hence essentially short-lived. When performed in the steady state, it is aerobic and may be continued as long as the necessary fuel reserves hold out, provided the subject does not cease working because of boredom. Although evidence was not collected in a manner designed to demonstrate the point, the results observed support the commonly held view that exercise which demands great expenditure of energy in a short time leads to hypertrophy, whereas exercise of endurance does not ([7]). When the load selected was supra-maximal, leading to rapid exhaustion, visible hypertrophy appeared early in the training period. When the load and speed of contraction approximated the optimum, there was less evidence of swelling of the belly of the muscle groups under study, even though total work done rose sharply as endurance improved.

Training curves are notoriously erratic. They are affected by innumerable variables difficult or impossible to control in the average clinical situation. Among them may be listed the influence on fatigue of sleep, meals, tobacco, coffee, previous exercise, time of day, temperature and humidity, drug, sensory stimulation and emotional stress. Of great importance is the mentalization from which motor learning cannot be separated when dealing with human subjects. The power of the psyche in the augmentation of work output is nowhere more dramatically demonstrable than when using the ergographic method. This suggests that the dosage of prescribed work may be significantly affected by the manner in which the occupational therapist administers the activity selected.

Summary and Conclusions

The importance of disability evaluation to the scientific practice of Occupational Therapy is discussed. Its multiphasic inter-related objectives are presented and the methods upon which it relies are classified as clinical, motor ability, and physiological tests. The finger ergograph is taken as an example of a simple exercise tool which lends itself to flexible adaptation in the objective estimation of the functional capacity of the neuromuscular system. The technique of ergography is discussed in the light of 158 experiments made on seven normal adult women. The evidence presented substantiates the following conclusions:

1. The character of the ergographic fatigue curve indicates the severity of the work performed.

2. Fatigue curves are characteristic for each subject.

3. When systematically carried on to the limit of capacity, repetitive exercise augments strength and endurance.

4. Total work output shows daily varia-

tions.

5. The slope gradient of the normal training curve varies markedly from individual to individual, even when experimental conditions are rigidly standardized.

6. Daily exercise effects a more rapid rate of improvement in volitional work capacity than does biweekly exercise.

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O. T. in Civilian Dress

By Clare S. Spackman, O.T.R.

Director of Occupational Therapy

Hospital of Graduate School of Medicine, University of Pennsylvania

Reconditioning programs in military hospitals have proved conclusively that a constructive schedule of varied mental and physical activities materially speed a patient's recovery. It has been demonstrated that vocational rehabilitation can and should start while the patient is still in the hospital.

Physicians returned from military service are urging that rehabilitation programs, based on the principles learned during the war but modified to fit the needs and limitations of civilian hospitals, be set up.

This can be done by developing the teamwork of the departments of social service and physical and occupational therapy under the coordinating supervision of the members of the medical staff.

The functions and technics of occupational therapy differ considerably in its varied applications. It can, however, be said that it is prescribed for one or more of the following reasons:

1. As a specific treatment in the restoration of mental health.

2. As a specific treatment in the restoration of physical function.

3. As a means of achieving psychologic rest for patients whose illness, length of hospitalization and convalescence indicate the need for a planned program of activity.

4. As prevocational training for patients for whom vocational rehabilitation is needed.

The purposes of treatment are accomplished by the use of manual recreational, educational, prevocational and industrial activities. The best results are obtained from a combination of these but the type of patient to be treated, the location and size of the hospital and the number and types of personnel available control the degree to which the various phases of occupational therapy can be developed.

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Certain general principles are applicable to the organization of occupational therapy departments in all types of hospitals:

1. A survey should be made to determine the number and types of patients to be treated. Conferences with the medical staff will gauge the patient load and the character of the program to be offered.

2. Based on the findings of the survey, space for the department should be allocated. A workshop which may also serve out-patients should be located as close to the physical therapy department as possible. There should be a storeroom and preparation space on the ward for storage of material and equipment. Office space should be provided for keeping of records, interviews, staff and student conferences. If maintenance is not provided there should be a dressing room for the staff.

3. Direct medical supervision should be arranged. In a general hospital the physical and occupational therapy departments may be under the same medical direction. In other types of hospitals one of the staff may be assigned to direct the total activity or rehabilitation program. No patient should be treated save by written referral from the physician in charge.

4. Qualified personnel, that is, registered therapists with experience in the special field served by the hospital, should be employed. As in many other professions there tends to be specialization in the treatment of one type of patient following graduation from school. A therapist, for instance, who has done psychiatric work for several years is not well qualified to treat physical injuries. Certain conditions, such as cerebral palsy, require graduate study before the therapist can treat then adequately.

Because of the extreme shortage of personnel many hospitals have been compelled to employ untrained or poorly qualified therapists. Emergency training was carried on during the war in the Army. With the reduction in military hospitals and the considerably increased number of training courses, graduates of accredited schools are becoming available in larger numbers and it is possible to obtain well qualified persons to organize and direct departments.

5. Adequate remuneration should be offered in order to attract satisfactory and experienced persons. The occupational therapist, in addition to her professional training, is now usually a college graduate. All graduates of accredited schools have had at least one year of college work as a prerequisite for a three year course in occupational therapy. Training courses range in length from eighteen months for college graduuates to five year courses which combine specialization in occupational therapy with the achievement of a college degree.

Federal civil service salaries range from approximately $2500 to $3100 for a staff therapist. Civilian salaries are lower but at the present time recent graduates of accredited schools seldom receive less than $1800 a year as an initial salary. The therapist should be employed by the hospital even though her salary may be provided by the women's auxiliary.

A stated system of salary increases makes for stable personnel. Vacations, sick leave and provision for medical care should be definite parts of the employment contract.

6. The types of records kept should be determined by the information desired by the medical staff or the hospital administrator. All patients' medical records should be available to the therapist and her report should be included in the patient's chart.

7. Business records should be set up to conform with the policies of the hospital. A method of ordering and purchasing supplies should be established and the books of the department should be audited regularly. An inventory of equipment and supplies should be kept.

8. Public sales of articles made by patients should be avoided if possible. The sale of the tangible products of occupational therapy has done material harm to the growth and development of the profession. The finished article is the by-product. The true product is the improvement of the patient. Insofar as possible patients should purchase their articles by paying for materials used or should make things for hospital use.

9. Occupational therapy is medical treatment; therefore, the patient should be charged for it as he is for other treatments. Such a charge sometimes destroys the psychological effect of the treatment by adding to the patient's financial worries. Hence, it is usually advisable to include the charge for occupational

therapy, with the exception of the cost of materials used, in the general daily rate of the hospital. In the treatment of insurance cases the fee should be comparable to that charged for physical therapy.

While the principles outlined apply in general to all hospitals, certain specific factors must be taken into consideration in the organization of occupational therapy departments in special hospitals or in the specialized services of a large general hospital.

The program of occupational therapy in a general hospital is largely restricted to manual, educational and recreational activities, which should be carefully planned and directed for their physical, psychological or prevocational application.

If the hospital has large surgical and orthopedic services there should be an outpatient workshop in close conjunction with the physical therapy department where quite extensive activities in the form of woodworking, printing and other occupations, which can be graded in the degree of physical strength they require, can be provided. Such a shop must provide occupations for men, women and children.

For Bed Patients

The ward program for bed or semiambulatory patients necessitates space for working and the construction of special equipment which can be adjustable to the needs of the patient in a cast in bed or to the patient in a wheel chair. For long term patients the necessity for diversion or recreation and, in the case of children, the need of education must not be overlooked.

In many hospitals the services of a school teacher and of a librarian are available, but when this is not the case it develops upon the occupational therapist to perform their functions as best she can with the help of such volunteers as she may enlist. The therapeutic value of diversion is inestimable but whatever activity is permitted should always be under the general direction of the trained therapist. Every effort should be made to make the occupations offered practical in their value either as exercise, as education or as development of hobbies.

In mental hospitals there is wide scope for the development of all sorts of activities, ranging from the fine arts to industrial work, which offer to the patient a program that may well be made to simulate normal living. Large workshops for woodwork, printing, weaving, garment making, upholstery and the like provide occupation of value to the patient and to the hospital as well.

If industrial work is to be truly therapeutic, each job should be analyzed and the patient should be assigned to it with careful consideration of his physical, mental and vocational needs. The hospital personnel under which the patient is to work should be given a brief indoctrination in the purpose of the program. All assignments should be made only after consultation with the physician. In some instances the occupational therapist is responsible for industrial assignments. If this is not the case there should be the closest possible correlation between assignments to the occupational therapy department and those to industrial work.

In Sanatoriums

In tuberculosis sanatoriums the occupational therapy program should be carefully coordinated with the vocational rehabilitation of the patient. Light manual and recreational activities may be provided for acutely ill bed patients. When the patient's physical condition permits vocational and psychological studies should be made to determine vocational objectives. From then on all treatment should be correlated with this aim.

The use of industrial activities both as prevocational training and as development of work tolerance should be of value. Recreational opportunities should be expanded.

Space will be needed for workshops for ambulatory patients where such work as photography or radio repair can be done. There should be classrooms for typing, art work and general study, library and recreational facilities. The use of the hospital radio not only for entertainment but for practice in radio work may be of great advantage. The printing of a hospital newspaper provides a wide variety of work suitable for many patients.

With such organization as has been suggested it is necessary only to establish close working cooperation among the various departments to develop a complete program of rehabilitation in any hospital.

A Part of the Whole

By HART E. VAN RIPER, M. D.,

Medical Director, National Foundation for Infantile Paralysis

With an ever-increasing specialization in medicine and the allied professions, man has been divided and segmented until we frequently lose sight of the individual as a whole and devote our talents to the part that is nonfunctioning.

Even the dramatic advances in medical science do not permit the most skilled physician to replace diseased organs or disabled members. However, we have developed a system of medical rehabilitation which assists man in making a readjustment to his disability.

In the field of medical rehabilitation we have a real opportunity to reconstruct man, with his infirmities, as an individual. We cannot logically concentrate our skills on the disabled extremity alone, for even the most skilled of artisans must have a will to execute the idea.

Rehabilitation embraces all of the therapeutic devices — medical, physical, psychological and vocational — to the end that each member of the professional team may make his individual contribution from the onset of the illness until the individual returns to his place in society.

The modern hospital, with its staff of specialists, diagnostic laboratories and special services, should provide a coordinated service to its patients, in which event it is worthy of their gratitude and the support of the community. This complex program of care can be no stronger than its weakest unit.

The National Foundation for Infantile Paralysis, through its professional educational program, has attempted to strengthen each unit by improving the training and experience of the professional personnel, including, in the clinical experience, the teamwork that is so essential.

Occupational therapy must make a real contribution in the field of rehabilitation.

As a member of the clinical team which includes the physician, nurse, physical therapist and medical social worker in addition to herself, the occupational therapist is in a unique position. She can, to a very large measure, help the patient re-learn a realistic approach to living. Because the occupational therapist deals largely with tangible and concrete activities she can bring to the patient an understanding of his ability "to do." Frequently, long weeks, months, or even years of inactivity, confinement to bed, and removal from normal social processes tend to leave the patient uncertain of his own capacity to do anything. The occupational therapist, if she is skillful and understanding, can rapidly reveal to the patient that his potential abilities are not theoretical but actual.

To carry on an effective program of *functional occupational therapy* requires not only excellent training but the use of good judgment and a clinical appreciation of the patient's felt needs. Such an occupational therapist will be less a technician and more of a professional worker using her knowledge of the physician's plan for his patient, to augment this plan and bring it to fruition in the daily activity program established for the patient.

Obviously such a program of occupational therapy is bound to be a coordinated one, for the therapist has made sure that she understands what the physician wants accomplished, she has checked with the other medical team members to determine their role in the plan, and she builds a scheme that fills in the gaps and assures the patient a chance of using his muscles and joints *for a purpose.* This is no program of "busy work," no program of exercise for exercise sake, but rather a living, meaningful plan of strengthening through use the bodily mechanism required to perform useful activities in the world to which he, the patient, is going to return.

Yours is a big, a very important task. To do it you need all the training, the experience and above all the full appreciation of the patient as a whole that you can acquire. Your profession is a living, vital one in which the challenge is great because as a member of the therapeutic team you frequently must "carry the ball." There are no stars on the team. Each and every one must do his share. And the goal — well, that is the returning of the patient back to his home and friends with as good or better ability to live his life than was true before he became ill. You cannot and must not fail him.

Red Cross Arts & Skills in Hospital Rehabilitation

EDWARD W. LOWMAN, *Comdr. (MC) U.S.N.*

The presence of Arts and Skills workers of the American Red Cross in military hospitals has been a familiar sight during and since the recent war. The value of their services rendered has been well recognized. However, the correlation and integration of volunteer groups with Occupational Therapy Departments' programs have not always been uniform nor satisfactory. Now with the war period closing, it would seem of value to analyze Occupational Therapy's job and to reevaluate the function of volunteer groups in hospital rehabilitation programs.

The recent war with its constant, urgent demand for actively combatant manpower provided the impetus for the most extensive rehabilitation programs yet sponsored medically. Britain's Tomlinson Plan, Rusk's Army Air Forces Program, and the efforts of the Army and Navy were all revolutionary in progress. In all of these, the prime objective has been the earliest possible return of the convalescent to duty in the best physical and mental state for such duty and, secondly, the return of the disabled to civilian life with maximum faculties for economic and social readjustment.

Prolonged hospitalization required of patients in military hospitals has admittedly been long regarded as a retarding factor in their convalescence. Its necessity, however, must be accepted since a service patient's hospitalization cannot be terminated until he is ready for return to full duty or ready for discharge to civilian life. There is thus imposed a long period of relatively idle convalescent time when he no longer requires active medical care nor feels ill but yet is not sufficiently recuperative to resume his duties. It is the idleness of this interim that breeds introspection, physical and mental inanition, and poor mental hygiene, the state commonly recognized as "hospitalitis" or "hospital fatigue." The maximum utilization then of the patient's idle convalescent time in pursuits of mental or physical productivity constitutes the major prophylactic weapon in an effectively instituted rehabilitation program.

In the evolution of present concepts of Rehabilitation, the role of Occupational Therapy has assumed an unprecedented stature of expanded import. The clay-modeling, basket-weaving, soap-carving and puff-matting which were once main fortes are now overwhelmingly absorbed by an expanded concept of infinitely greater scope and vastly sounder logic.

Occupational Therapy may now be considered as comprising three distinct phases of application: (1) Functional Therapy, (2) Diversional (or avocational) Therapy, and (3) Pre-vocational Therapy. The three phases may coalesce into a single one or each may be pursued separately in accordance with the individual patient problem. Wherever possible, multiple phases should be combined, thereby accomplishing multiple objectives with a single pursuit.

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FUNCTIONAL THERAPY: Functional occupational therapy, as is well understood, is the utilization of a specific craft or skill by a patient for the prevention or correction of a physical disability. This need not be further elaborated upon; it is the conventionally accepted concept.

DIVERSIONAL THERAPY (avocational therapy): Diversional therapy is the utilization of crafts or skills for the sole purpose of prophylactically occupying a patient's time in the prevention of Hospital Fatigue.

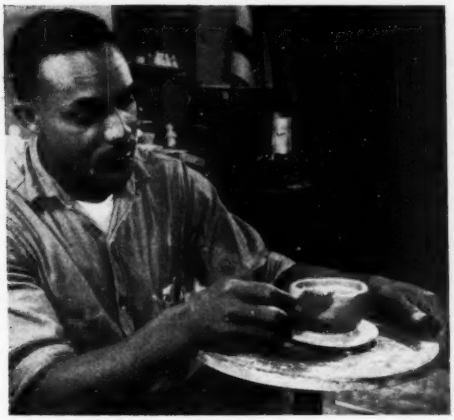
PRE-VOCATIONAL THERAPY: This entails the use of crafts or skills by a patient for pre-vocational training, or at least for pre-vocational orientation, the pursuit of which is of economic value and at the same time compatible with an existing physical disability. This does not encompass vocational counselling but is a coordinative function with and the application of recommendations of the counsellor.

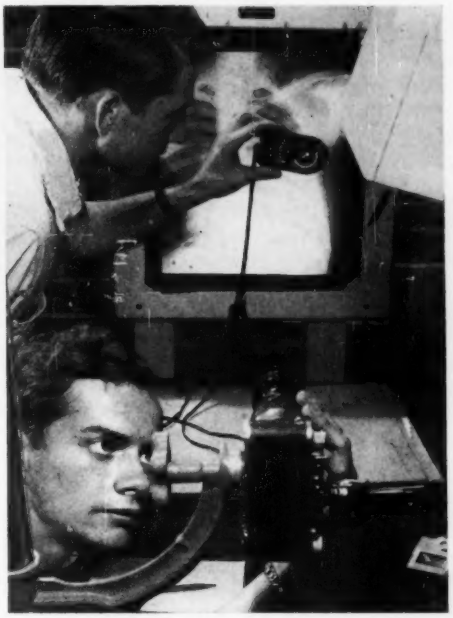
The successful application of Occupational Therapy for functional results is to a large extent dependent upon stimulation and maintenance of the patient's interest. The latter will be accomplished in direct proportion to the occupational pursuit selected and to the technician in charge of the case. It is important, then, that the therapeutic medium selected be of potent stimulation content. The average minor or semi-skilled craft, being deficient in sustaining interest, fails to meet this criterion. Where it is possible from the standpoint of the primary objective, it is desirable to utilize avocational or pre-vocational pursuits for attainment of functional results, thus accomplishing the primary objective with greater success and at the same time crystallizing multiple objectives with a single basis undertaking. If it is possible, for example, with an arthritic to mobilize a potential pre-vocational interest in the design and molding of plastics and through this work in plastics to attain a desired functional result with the deformities or contractures being treated, then by all means this should be vigorously pursued; by such planning is attained a three-fold functional-diversional-pre-vocational objective. The same applies to radio-repair, diesel, gardening, drafting, cobbling, sewing, and innumerable other fields.

Experience in the recent war has brought to the fore a far greater utilization of diversional (or avocational) occupational therapy and thus an accentuation of the responsibilities of this department in hospitals. The relative preponderance of non-remedial work was necessitated by the high percentage of recuperative patients characteristic of service hospital censuses. While not remedial in the strict sense of preventing or correcting organic disability, this diversional therapy has been a paramount factor in the prophylaxis of Hospital Fatigue; as such, its prophylactic therapeutic value often far exceeds the remedial therapeutic value of strictly functional occupational therapy. Furthermore, its breadth of application is unlimited and it should be prescribed for all but the very short-term patient. As with functional therapy, it is desirable where possible to utilize pre-vocational as diversional therapy; this is particularly important for the patient who has not established himself economically or who, because of an intercurrent disability, will need to readjust himself economically in civilian life.

It is immediately obvious that personnel requirements for the operation of so extensive a program are considerable. At the same time, it is apparent that for the greater part of such an over-all program, the immediate presence and participation of the trained occupational therapy technician are neither necessary nor financially feasible. The need is for persons possessing particular skills or craft ability without the medical background of anatomy, kinesiology, physiology, etc., as is expected of the occupational therapist. They should be master craftsmen and teachers in their particular fields, an attribute which cannot be expected of the average technician whose training must be along many craft lines and always with emphasis on therapeutic application. It is in this tremendous personnel gap that the Arts and Skills Corps of the American Red Cross can contribute most productively.

The Arts and Skills Corps of the American Red Cross is composed of volunteers from local communities who because of particular ability in an art or skill offer their time for teaching in local service hospitals. To ensure superior personnel, volunteers are required to submit work samples for impartial jurying prior to acceptance into the group. Time volunteered varies from fulltime to any increment thereof.





Ceramics and photography are similarly potent in avocational or prevocational content.

The expense of supplies and equipment, which is often great in the face of so expansive a program, is primarily met by the hospital served and supplemented generously if the need be, by the local sponsoring Red Cross Chapter. All supplies are free to the patient.

Arts and Skills groups function as integral parts of the general occupational therapy program under the general supervision of the Rehabilitation Officer and under the immediate surveillance of the occupational therapy department and not as independent units. Ideally, for stability and expeditious operation, it is desirable that the Corps be headed by a full-time Red Cross coordinator who, under and with the occupational therapists, assures integration with other Rehabilitation activities.

It is obvious that with such a group of "specialists" the diversity of activities offered may be great. For the bed patient, the restriction imposed by his bed status requires participation in simpler crafts. But, once the patient is up, he may be routed to shops where more extensive and more intensive participation is possible. Where possible, shops should fulfill the pre-vocational requirement though not necessarily so. The use of such things as plastics, silverwork, metalwork, photography, pottery, cabinet-making, electronics, etc., has a latitude bounded only by the availability of the volunteers (see cuts).

The use of this expert assistance has been invaluable in the successful operation of service Rehabilitation Programs and in the attainment of desired objectives. This success is now being reflected in similar extensive programs being introduced at present in Veterans Administration Hospitals throughout the country.

In civilian institutions, the evolution is just now underway for the establishment of adequate rehabilitation facilities. The deficiencies here have become the more glaringly obvious in the face of wartime military medical successes. The transition will be expensive financially and slow in its initiation, but over-all cannot but prove an economy. The ultimate place of Occupational Therapy in such a civilian program must be premised in most cases upon the expanded concept of the function of Occupational Therapy. With these broadened responsibilities to be met, the profession will do well to court the continued valuable aid of such skilled groups as the Red Cross Arts and Skills Corps.

Some Functions of Occupational Therapy—Military and Civilian

NATHANIEL WARNER, M. D.

Payne Whitney Psychiatric Clinic

There is little doubt that the same principles relating to the value of occupational therapy apply in general to men under stress, whether in the military or in the civilian setting. Military experience probably has not produced new uses for occupational therapy, but it has given a varied emphasis to some of the old uses. The martial scene has acted as a setting in which certain aspects of occupational therapy have been cast in bolder relief. It is the purpose of the present article to discuss some important functions of occupational therapy which were highlighted among troops in the recent war. The observations to follow were made while the author was on duty with a U. S. Marine Corps Division in the Pacific area.

During the period of preparation for combat one of the main tasks of the psychiatrist was to help the troops achieve and maintain sufficient stability of personality to enable them to perform their military duties effectively. The stability, and hence the military efficiency, of the men was threatened by two main types of stress. In the first place, they were forced to adapt to a mode of life which was foreign to their previous experience, as well as distasteful to them. In the second place, they were confronted with the prospect of death or mutilation in combat and with the fear and anxiety which that prospect inevitably engendered in them. The success with which the men adapted to those problems determined in large part the adequacy of their total function.

The hospitalized patient in civilian life is commonly obliged to face problems which are qualitatively similar to those mentioned above. The individual who is forced by chronic illness to leave his home for residence in a hospital must also adjust to strange and unpleasant conditions of life. To say that he has an adequate reason for accepting this change does not alter the fact that his new environment poses many problems which he would rather avoid and also entails giving up many comforts and pleasures which he previously enjoyed.

Also, the hospitalized civilian, like his military counterpart, may be obliged to face the prospect of death or permanent deformity. He may be expected to feel fear and anxiety as he contemplates his chances of recovery or as he considers the difficulties he will have to meet in adjusting to life in spite of a weak heart, a paralysed limb, a compulsion neurosis, or some other disease handicap.

Occupational Therapy and Morale

Perhaps the most obvious way to enable men to face the discomforts and dangers of military life is to build up and maintain their morale. It is generally recognized that troops with high morale train better and fight better than those with low morale. And indeed, it is also well known that the speed of recovery of patients in any hospital is closely related to their morale.

In a previous article* morale was defined as the net satisfaction derived from acceptable progress toward goals or from the attaining of goals. If the individual believes he is making reasonable or acceptable progress toward his goals or in the resolution of his drives, he will derive satisfaction thereby and will be able to carry on more effectively. Conversely, if he feels unnecessarily frustrated in the realization of his drives, his spirits sag and he loses interest in forging ahead. Moreover, if he actually achieves his goals, he becomes more satisfied and finds new desire or ambition to tackle further goals. This is as true of hospitalized

patients as it is of soldiers in camps overseas.

The above definition of morale emphasizes the importance of NET satisfaction in goal seeking. Obviously everyone will have some goals which are not in a way to be readily achieved. But the depressing effect of that fact can be counterbalanced by clearing the path toward the achievement of other goals. That is why such items as good food, adequate housing, and suitable entertainment were, and still are, so important in boosting morale. The men overseas had a primary drive to get the war over with and get home. Discouraging difficulties and delays in the fulfillment of his goal were counterbalanced by attending to other drives, so that the men felt real satisfaction of some of their wants. It was here that occupational and recreational therapy found great usefulness among the troops. Those men who already had hobbies or recreational interests found much satisfaction in the successful pursuit of them. Some of their drives were thus satisfied, and their morale was correspondingly raised. In men who had no established interest in any occupational therapy activity it was often possible to build such an interest. Once this was done, they felt a new drive, they sought a new sort of fulfilment. Then by pursuing that drive they gained satisfaction and their morale tended to rise. Often men demurred until they were strongly persuaded or obliged to engage in diversionary endeavors of some sort; and then they became enthusiastic as they found realization of their new interests.

The problem was nicely illustrated by the situation which prevailed when our troops first occupied the home island of Japan. The novelty of the new environment soon lost its main appeal, and then morale slumped to dangerously low levels. This was due to the fact that the one outstanding drive of all the men — to go home — was frustrated. No amount of reassurance or encouragement would alter that desire. It was possible, however, to alleviate the situation by leading the men toward satisfaction in other ways. Recreational and diversionary outlets were gradually (all too gradually!) organized. Fortunately, there were instances in which local commanding officers took a keen interest in the problem and organized a variety of diversional activities for the men, and morale in their outfits seemed to rise in proportion to their efforts. Interorganization competitions of various sorts were arranged. Men experienced in various subjects gave informal instruction to the troops. Sight-seeing expeditions were conducted to places of interest. The services of Japanese were enlisted to give instruction in Japanese language, customs, history and geography. Classes in Japanese art technique and appreciation were formed. And in one instance a Japanese pottery plant was taken over by the Americans and turned into an occupational therapy project, with the native potters as instructors.

It should not be assumed that good results were attained simply by distracting the individual from his disappointments and concerns. There were officers who felt that to be the case and arranged for activities which lacked inherent appeal. For example, one outfit ordered the men to spend many hours in close order drill and in training in military maneuvers. That satisfied no drives and therefore resulted in aggravation of what was already a bad situation by decreasing the net satisfaction of the men. Fortunately such activities were kept at a minimum by most of the leaders.

The situation among troops on occupation duty has its parallel in many of our civilian hospitals today. In some little attention is given to stimulating and then fulfilling the drives of the patients, and morale is low. In others the staff makes considerable effort to stir up and fulfill the interests of the sick, and morale in such institutions is more likely to be high. By helping the patients to find satisfaction in the pursuit of various secondary goals the occupational therapist acts as a morale officer on the wards. By developing an effective technique of appealing to the manifest or latent wants of the sick she can make a significant contribution to their happiness and thus to their morale. In this way she may enable the handicapped individual to achieve a more wholesome and contented attitude toward his total situation. Such an improved attitude can readily spell the difference between continuing disability and satisfactory adjustment to life.

Occupational Therapy and Emotional Conditioning

High morale did much to prepare troops for battle, but it did not assure successful perform-

ance, even assuming that the men had had adequate training in the methods of warfare and the use of the implements of destruction. Emotional conditioning to the dangers ahead was also necessary.

Anyone who anticipates having to face a severely menacing situation is likely to give considerable thought to that situation; and the manner in which he conducts that thought will determine in large part how he is able to cope with the situation when it arises. The average soldier talked little or not at all to his pals about his personal fears or bodily harm; to do so might be mistaken as a sign of weakness or cowardice. But it could readily be demonstrated that the great majority of combat troops gave much thought to their prospects in combat. At frequent intervals the average man expecting to go into combat turned his thoughts to the anticipated engagement and how he might fare in it. As he thought of what he had been told or what he had seen in previous encounters with the enemy, he would get a sudden feeling of fear and would then turn his thoughts to other things. Thus he would promptly rid himself of his unpleasant affective state. A little later such thoughts would recur; and again he would dispel them, and the fears associated with them. As time passed and this process was often repeated, he gradually developed a state of emotional preparedness for the ordeal to be faced, working himself up to an increasing tolerance to fear stimuli and engendering in himself an emotional "set" or state of mind which would help him cope with the challenge his environment was to present to him. This process of emotional conditioning was nicely illustrated by the fact that when the men anticipated going on a military operation at a certain time, only to have the plans changed at the last minute, they reacted in a "let down" manner almost akin to disappointment. This was not due to any desire to face death, but rather to the fact that they knew that with the change in plans they would have to rid themselves of that emotional state they had so laboriously built in themselves, only to have to rebuild it when a new date was set for combat. The same phenomena was observed in the testimony of air corps pilots, that once they had been briefed for a mission, they would much rather go on it than have it cancelled for some reason. They had prepared themselves for action, and they needed that action to reduce the emotional charge.

This is essentially the process undergone by anyone facing a menacing future. The hospitalized patient may not openly discuss his fears or anxieties over his ability to meet life adequately when he goes home, but you may be sure that he gives it much thought. Like his military counterpart, he usually thinks of the problem until he feels fear or anxiety in disturbing degree, and then he tries to turn his attention to other things, only to have the same thoughts recur a little later.

Some of those who anticipate a menacing situation become preoccupied with thoughts of it and are unable to turn their attention to other things. The individual in this predicament is unlikely to be able to control his anxiety unless he can distract himself from his frightening thoughts. Occupational therapy is one means by which he may disengage himself from his fearful preoccupations — a means of tempting mental activity into more salutary channels.

There is good reason to believe that the process of emotional preparation for a menacing future is not conducted entirely at the conscious level, and that even when the individual is not consciously aware of it, he is nevertheless undergoing mental activity aimed at the adjustment to his anticipated future. It may well be that by far the most important part of the adjustment process is conducted unconsciously.[1] The layman gives recognition to this process when he speaks of "sleeping on" some problem before deciding on it; and it is by no means rare for one who adopts this process to arrive at an adequate decision or attitude in a sudden "intuitive" manner and without prolonged conscious thought. Psychiatrists also recognize the process when they advise patients not to dwell consciously upon their problems in the periods between interviews, on the basis that the material uncovered during interviews will be better assimilated if not over-attended to consciously. A proper balance between conscious and unconscious

[1] Note: The term "unconscious" as used in this paper refers only to mental activity of which the subject is not consciously aware. Employed in this sense, the word avoids the highly controversial question of the nature of mental activity which is not conscious.

thought is indicated! and just as the man who cannot take his mind off of his concerns will have trouble in coping with them, so the man who gives them no conscious thought is likely to be unable to adjust to them when the time comes.

The efficiency with which unconscious thought of a fear-producing situation is conducted will depend upon the extent to which various stimuli compete for the attention of the individual. The man who finds nothing in his immediate environment to catch his attention is very likely to become consciously preoccupied with his anxieties. At the other extreme, during the period a man's attention is fully occupied by his immediate environment, as by an exciting movie or novel, he is unlikely to concern himself, consciously or otherwise, with his anxieties. Somewhere between the two extremes unconscious activity should find its most effective expression. The optimum point cannot be clearly defined. Yet logic as well as experience suggest that occupational therapy may distract and interest the individual enough to prevent conscious preoccupation but at the same time not confine mental activity so much as to impair its continuance below the level of conscious awareness.

It was with these considerations in mind that we tried to supply the troops of our division with a large quantity and variety of diversional outlets during the period in which they were getting ready for the next operation. A surprising number of men were stimulated to take part in carving, weaving, carpentry, knotting, and so on. The available equipment was in constant use. The program was given the most enthusiastic support by some of the junior officers who had to go into the front lines with their men and were directly responsible for seeing that the men did their jobs with speed, efficiency, and a minimum of casualties. As the date for combat drew closer, the men found it increasingly difficult to take part in diversionary interests which demanded their full attention, but they were able to control their thoughts by engaging in activities such as occupational therapy, which kept in check the tendency to conscious preoccupation over their anxieties.

Most of the troops recognized their need to keep their minds diverted from excessive thought of their worries. The civilian patient is less likely to realize this need in himself, perhaps because his total problem is less clearly defined in his mind. But the same need is there, and the occupational therapist is commonly the logical person to help the patient fill it, and also help him conduct his unconscious thought with maximum efficiency.

Occupational therapy of itself does not cure patients. But then, neither do doctors cure patients. They try to arrange the internal and external environment of the patient in such a way that he is able to cope with the situation which menaces him. By gauging her activities toward the satisfaction of drives, and therefore toward the elevation of morale, by reducing the tendency to conscious preoccupation, and by assisting in the unconscious assimilation of anxiety-laden situations the occupational therapist can play a role of great importance in the recovery of the patient.

*Reference: N. Warner—The Morale of Troops on Occupation Duty—Am. J. Psychiatry, Vol. 102. No. 6; May 1946; pp. 749-757.

The Future of Occupational Therapy in the Army

Paper delivered at the Annual Convention of the A.O.T.A., 1946

by Wilma L. West, O.T.R.

Facts and figures relating to any large program or undertaking are sometimes loosely conceived, often incorrectly quoted and always grossly misinterpreted. Due to the vast number of situations and individuals involved and the fact that authority and responsibility are usu-

ally decentralized in the interest of temporary efficiency, these characteristics are inevitable. They are true of the Army occupational therapy program no less than of other comparable undertakings.

Many of you present today are acquainted with various aspects of all that has been attempted and much that has been accomplished in the Army. Through the medium of individual contacts, formal speeches, newspaper and magazine publicity, exhibits, and the ever-active "grapevine," word has been spread. Inevitably, it has one time worked to our undeserved credit and another to an unfortunate disadvantage. At the risk of repeating what is familiar to a few, but in the interest of making the facts available to the many, those aspects which are considered significant in an historical panorama of the Army program are presented in the following graphs and maps.

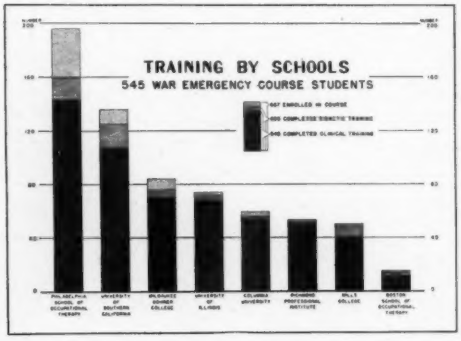


Chart I

Beyond any conceivable doubt, the greatest single problem facing the development of an occupational therapy program in the Army was the scarcity of personnel. Contrary to popular belief, the number of graduate therapists who left civilian positions for service in the Army never attained impressive proportions. The peak number recorded on V-J Day, 14 August 1945, was only 204. 150 students from civilian schools received clinical training in Army hospitals and were subsequently appointed to staff positions. By the same token then personnel was counted as the major drawback, therefore, its solution is listed as a major accomplishment.

This solution came through a government subsidized training course, the didactic portion of which was conducted by 8 accredited civilian schools and the clinical portion in 40 selected Army hospitals. In all, a total of 545 War Emergency Course students were trained during the two-year period from July 1944 to June 1946. (A series of charts was used to illustrate this paper. Two charts are reproduced with this article and others are discussed.)

Chart I shows a total of 667 students enrolled in the 21 courses given at 8 schools. From this original enrollment, only 605 students completed didactic training, showing a loss of 62 students or 9.3%. Factors such as illness, maladjustment, marriage and academic failure contributed to this rate of loss. It is higher than that found in regular courses but it is not considered disproportionate to the rate of loss in comparable wartime training courses. Of the 605 students entering clinical training, 545 completed the course, a loss of 60 students or 9.9%.

The geographic distribution of these war course students by recruitment is computed on the basis of Army Service Commands, of which there were nine, instead of states, which would have necessitated 48 breakdowns. Highlights by states showed California in the lead with 92, New York second with 80, Wisconsin third with 57, and Illinois and Pennsylvania tied for fourth place with 29 each. All except 5 of the 48 states were represented, these being Idaho, Arkansas, Mississippi, South Carolina and Maine.

In *Chart IV,* there is a graphic illustration of the age range of the war course students with about 50% between the age of 21-23. Ranging from 19 to 47 years, the unmistakable peak is seen to be at the age of 22. Although the age limits of 21 to 35 were recommended, the 28 students over, and 32 under the age limit represent only an 11% digression. This digression is largely explained by the reluctance of the Civil Service Commission, under whose jurisdiction candidates were selected, to discriminate against age.

Chart V reveals even more interesting facts about the 545 war course students with regard to the educational level they represented.

93.4% had college degrees as follows: 222 holding the degree of Bachelor of Science; 214 Bachelor of Arts, 32 Bachelor of Fine Arts and 15 Masters degrees. The remaining 26 represent Bachelor of Education, Bachelor of Philosophy, and similar types of degrees. In the final column are 36 students with no college degree but an educational equivalent in terms of art school or teaching experience. The average educational level represented by this group was 3.8 years of college. This 6.6% apparent lowering of standards is attributable to Civil Service policy of substituting experience for formal education.

In addition to the War Emergency Course for training registered therapists, the Army also established courses for training enlisted members of the Women's Army Corps as assistants to occupational therapists.

Chart VI shows that 278 WAC's were trained in 11 classes held monthly from December 1944 to October 1945. Approximately 94% completed the course. These courses were supervised by a captain in the WAC who was a registered occupational therapist and had had experience in an Army hospital occupational therapy department. The courses were designed to acquaint students with basic manual skills and technique only. Medical subjects were excluded from the curriculum since it was intended that the personnel thus trained be used to assist with instruction in crafts, preparation of materials and similar non-professional duties. On satisfactory completion of training, the WAC's were assigned to various general and convalescent hospitals having requisitions for their services.

Chart VII is a brief recapitulation of both the personnel and hospital picture over a five-year period. It uses as base dates for comparison the pre-war date of 1 August 1941; Pearl Harbor Day, 7 December 1941; V-J Day, 14 August 1945; and today, 1 August 1946. On the first date, August 1941, there were 11 general hospitals and 9 occupational therapists in the Army. On Pearl Harbor Day, the number of hospitals had increased to 13 and the number of therapists to 12. At the peak of the war period, on V-J Day, occupational therapy had been established in all 76 general and convalescent hospitals in operation, with personnel totaling 899. It is to be noted that of this number only 447 were graduates and 452 apprentices still in clinical training. Today our personnel numbers 290 graduate therapists located in 38 general, regional and station hospitals. Slightly over half of this number are graduates of the War Emergency Course. Of the 600 who formerly served with the Army and have resigned or been declared surplus in the past nine months, it is estimated that somewhat over 250 have taken positions in the expanding program of the Veterans Administration and the remaining 350 have returned to the civilian field or matrimony.

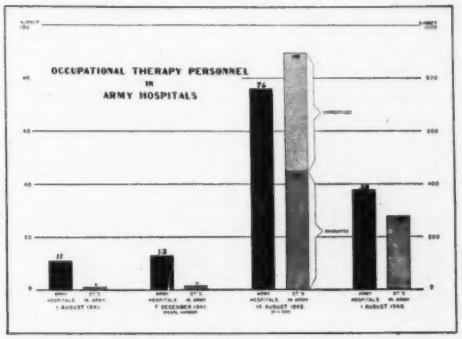


Chart VII

In conclusion, referring briefly to my opening remarks, these are the facts and figures of the Army story. They do not lie. They have been scrupulously computed, correctly quoted and it is sincerely hoped that they will be properly interpreted. They reflect a picture which is a credit to every occupational therapist. The only thing they fail to say is that we of the Army program hope that you in the civilian field, who have made it possible for us to serve, are proud of the record that has been made.

Miss West's paper is a continuation of the report by Miss H. Elizabeth Messick, O.T.R., which appeared in the February issue. The concluding section will follow in a later number.

Occupational Therapy with Filipino Amputees

By Elizabeth Nachod, O.T.R.

Brook General Hospital, Fort Sam Houston

In the winter of 1945 a group of military personnel from the Philippine Army was sent to the various amputation centers of the United States Army general hospitals. They observed the various methods used in this country for the treatment of amputees and the techniques used in making the artificial limbs. Later on a request was sent to the Surgeon General from the Philippine government asking for assistance in establishing an amputation program for the benefit of the Filipinos who had suffered an amputation in World War II.

Civilian O. T.'s Betty Nachod and Mary K. Berteling "on location" in the Philippines.

The result of this request was the organization of an amputation and prosthetic team staffed by United States Army personnel who had been working with amputees in the Army general hospitals. In the early days of World War II, those people who were in the amputation centers encountered many problems in treating and making prostheses for amputees. But much was gained from experience so that these mistakes did not need to be repeated when setting up an amputation center in another country.

The purpose of this amputation and prosthetic team was to set up an amputation center and in a six months period train Philippine Army personnel in the treatment of amputees so that they would be capable to treat and fit prostheses for their own people.

It was decided that a complete unit, consisting of every phase of amputation treatment, would be sent to the Philippines. That included not only personnel but also the necessary equipment and supplies for an amputation service. The supplies and equipment of the unit were identical to those which were used in our hospitals in the states.

The staff consisted of five Army officers (one surgeon, one supervisor of the limb shop and supplies, two physical therapists and one amputee who demonstrated and assisted in walking classes), two civilian occupational therapists, Mary K. Berteling and Elizabeth M. Nachod, and sixteen enlisted men who were technicians in the limb shop.

The unit was located in the Mandaluyong hospital center five or six miles outside of Manila adjacent to 1st Philippine Army General Hospital, where most of the amputee patients were hospitalized. Those patients who were not hospitalized in this hospital were Philippine Scouts and they were in the 100th Station Hospital which was staffed by U. S. Army personnel. The buildings were constructed of corrugated metal and were nine in number. The largest building housed the office, an examining room, the limb shop, cast room and machine shops, and the smaller buildings, the supply rooms, occupational and physical therapy.

After 30 days on the water, which included a seven-day layover in Okinawa, on the morning of June 29, 1946, the two occupational therapists got their first glimpse of the ruins of Manila. The first two days were spent looking around the unit and riding jeeps over the bumpy, dusty (or muddy, depending on the precipitation at the time) roads of Manila to receive the necessary processing, which is a routine procedure in Civil Service. As a jeep was the means of transportation between living quarters and the shop, it was at this time decided by the therapists that the orthodox white

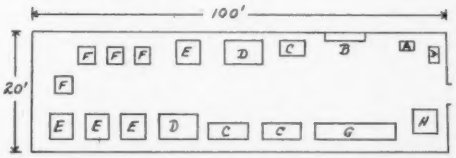
uniform and cap prescribed for Army occupational therapists was out of the question. So a new overseas occupational therapy uniform "was born"—the khaki slack uniform worn by Army nurses. As well as being most practical for jeep transportation, it also proved to be very practical around the shop.

While some of the Jap P.W.'s were busy opening crates of supplies and equipment, others were engaged in making tables, woodworking benches, cupboards, a warping frame, an amputation panel (for purposes which will be explained later) and other incidental equipment necessary for the shop. The Japs seemed to have no difficulty in carrying out instructions for the tables, cupboards, etc., but when it came to the specialized equipment, they were most confused. However, after numerous sketches and a little sign language, the equipment was built to the therapists' satisfaction. This language difficulty with the Japs continued throughout their assignment with the unit, but in due time an understanding was always reached.

About a week after the arrival of the therapists, one loom was completely set up, a cupboard completed, leather tools and leather uncrated, and a sufficient number of tables and chairs moved in to accommodate the first patients. The Occupational Therapy Department was ready to function. Gradually the shop took on the appearance of an Army Occupational Therapy Department one might see in the States. Several activities were lacking either because of climatic conditions or because the supplies would be difficult for the Filipinos to secure after the initial supply from the United States Army was exhausted. The following is a diagram showing the floor plan of the shop. The sole purpose of this diagram is to show how the space given to occupational therapy was used to best advantage.

Other activities used in the shop which do not appear in the diagram and which have not already been mentioned are metalwork, card weaving, belts woven with the use of tongue depressors and cord knotting. Sketching and painting were also done by a few of the patients.

Lumber was a very scarce item and since there were no funds allotted to the unit, "scrounging" was the answer to the lumber problem. This method was comparatively simple at that time, because the Army engineers were in the process of tearing down excess barracks buildings. Crates were also knocked apart and stacked according to size for future use in the shop.



KEY: A—Braid weave frame, B—Amputation panel, C—Work tables, D—Woodwork benches, E—Power tools, F—Foot power tools, G—Table with 8 structo looms, H—Floor loom. Office equipment, storage space and the lumber rack are not indicated although they were included in the shop.

The climate created numerous problems as far as the upkeep of the equipment was concerned. The sides of the building came within about twelve inches of reaching either the roof or the floor, offering little protection from the weather. The situation was helped somewhat after shutters were placed on that side of the building from which the rain came most frequently. The reeds in the looms were already beginning to show signs of deterioration before the unit left Manila. It was suggested that bamboo reeds, such as those used on the native looms, be secured if possible. Those heddles which were not aluminum were lacquered before setting up the loom. Tools which would rust were constantly oiled and the power machines and looms had to be covered every night and anytime during the day when the rain blew through the shop.

The first patient to be fitted with an arm was a former captain of the Philippine Army, who at the time, was studying for his bar examination. Because the country and the habits of the people of that country were entirely new to the therapists they knew that there would have to be some changes made in the types of achievements to be attained by the patient from the types of achievements used in the States, so that they would fit into the mode of living of the Filipino. The captain had lived in Manila most of his life, but had some knowledge of the life led by the people from the provinces. The aim and purpose of the pro-

gram was explained to him and pictures of amputees using upper extremity prostheses, which were taken in some of the Army hospitals in the States, were shown to him. He was able to make a few helpful suggestions as to what might be superfluous and what might be added.

The patients accepted occupational therapy and were most appreciative of all that was done for them and given to them. Many of them found it hard to believe that the projects they made—most of them being a luxury to them—were for their own personal use. As far as crafts were concerned, many of them were very skillful and original in what they produced. And on the other hand, as in all departments, there were those who did very poor work, but at the same time enjoyed participating in the activity. Probably the most popular craft was leather work with weaving and woodwork running a close second.

There was, of course, a language difficulty between patient and therapist. This was seldom a problem because many Filipinos know not only the native tongue but also English. However, when the problem did arise it was necessary to find an interpreter, a patient who came from the same province as the patient who was unable to understand English. To give one an idea just what this problem might be, there are some eighty dialects throughout the Philippine Islands and each dialect is like a different language. Photographs were an excellent medium for explaining the purpose of the program to these patients—and all patients for that matter.

Most of the patients were found to have excellent coordination, which helped tremendously in training the patient to use the prosthesis. This was also found to be true of the leg amputees. Another contributing factor was the physique of the average Filipino. Their slight build simplified fitting the prosthesis so that there was seldom the problem of limitation of elbow flexion with below elbow amputees, due to excess flesh on the forearm.

The program was carried on in much the same way as it was in the States. Patients reported to the shop whether or not they had been fitted with a prosthesis. Pre-prosthenic treatment was emphasized but was found to be less valuable to the Filipino patient. The reason for this was due to the fact that most of them had received their injuries, three, four and some even five years ago, and because they had no alternative had learned to accomplish everyday activities with the use of only one hand. However, it might be interesting to note here that many patients wore wooden clogs instead of shoes and it was not uncommon for a therapist to find a patient with his bare foot on a bench or table holding his work securely! It was seldom necessary to do any training in writing where a patient had lost his dominant arm, because there again the patient had trained himself, through necessity, to write a legible hand. To summarize treatment of the Filipino pre-prosthetic patient it can be said that the benefits were principally diversional with a gratifying psychological response from many of them.

A checker game and an amputation panel were built on the same lines as those used in our amputation centers. For those who are not familiar with the program the checker game is made up of checker men of various shapes and sizes and is used in early training to help the patient understand the manipulation and control of the prosthesis. The amputation panel is a board which has fastened on to it various household appliances, such as a variety of types of light switches, water faucets, telephones, window and drawer handles, etc., all of which are placed at that level on the board where that particular appliance is most frequently found. The purpose of the board is to give the patient practice in using his prosthesis in these activties. The checker game proved to be successful with the Filipinos as well as Stateside. On the other hand, the amputation panel was not too successful with the Filipino. In the first place, fitting the board with the necessary accessories was difficult because many of the items were not available to the unit. In the second place, most of the patients lived in the provinces in the typical native nippa hut where most of these items were non-existent. Manual labor using woodworking tools, garden tools, lifting heavy objects, etc., was stressed for most patients in preference to the above. A garden was spaded by the patients but old seeds and the rainy season were not conducive to a thriving garden. Office activities such as typing, filling a fountain pen, clipping papers together, etc., were stressed only to those patients who would ever

have occasion to use them. Craft activities were continued after the patient received his prosthesis as an aid to increase the patient's skill.

After the program for the arm amputees was running smoothly, one for the leg amputees was started. The purpose of occupational therapy for these patients was to give them an additional activity such as operating the bicycle jig saw, treadle sander or loom, to help increase skill in the use of the prosthesis. All of the patients seem to be intrigued with the shop and all of them were anxious to participate. However, due to the problem of number of patients vs. size of the shop and amount of equipment for leg amputees it was not practical to allow all of them to participate immediately. It was decided that after a patient had received his lower extremity prosthesis, upon the advice of the physical therapist he would be ready for occupational therapy. Because the equipment that was necessary for their treatment would accommodate five patients at the most at one time, the program was both a treatment and diversional one. In woodworking, for instance, a patient made an article doing some of the cutting (amount depending on patient's work tolerance at the time) and sanding by foot power equipment and completing the project with hand and power tools.

During the time the two therapists were assigned to the unit they trained two Filipino girls in the occupational therapy amputation program. Both girls had nurses' training for a background. One of them was a member of a group from an orthopedic hospital in Manila. The hospital was under the direction of a prominent Filipino orthopedist who hoped in time to be able to have a set-up similar to that of the Army. The nurse who was trained in the Occupational Therapy Department proved to be very competent and was also of considerable help to the therapists. The second girl, who arrived late, was a Philippine Army nurse who was trained for the purpose of continuing the program upon departure of the therapists. She also proved to be competent and in some respects had a better understanding of the problems of the patients as well as a complete comprehension of the program.

Because the unit was the only one of its kind in the Philippine Islands visitors were frequent. The most distinguished visitor was the president of the new Philippine Republic—President Manual Roxas. During the inspection he was accompanied by some of his cabinet members and staff.

By the first of October the Filipinos were working independently in the shops and clinics and the American personnel were standing by to give any final assistance which might be necessary. The unit was deactivated the middle of that month and then it was just a matter of awaiting orders for transportation back to the States. The last member of the unit sailed under the Golden Gate just in time to be home for the holiday season.

"There is a 'Reach' to Music . . ."

Bertha J. Piper, O.T.R., Director, Occupational Therapy, Fairfield State Hospital, and Mrs. B. S. Winchester, Instructor of Music, Newtown, Conn.

"'I shall now create an art for the whole people, an art for city and country, for palace, for hut, for the vast assembly, or the lonely heart. I shall give to the mind music . . .'" (From Newell Dwight Hillis: THE QUEST OF HAPPINESS. By permission of the Macmillan Co., Publishers.)

Music has compelling attractiveness and is unsurpassed in value among the variety of methods in a psychiatric occupational therapy program. Because it is comprised of sound, rhythm, and mood, it reaches and impresses the listeners — in varying degrees, but without fail. One of the country's leading industrialists has said, "There is a 'reach' to music which the other arts have not; it seems to 'get' to you in an exhausted mood and quiets and refreshes where a book or a picture is not so sure." An occupational therapist might say, "Where many other methods are not so sure."

It can transform moods — unpleasant, disagreeable, argumentative moods — into more tolerant, approachable, happier states. It can

scatter anxieties and fears, and create vivid, refreshing impressions. It can replace brooding and fantasy by directing attention to surroundings. Its rhythmical appeal relaxes taut nerves and reduces weariness. It releases emotional tension, bringing a sense of relief and reassurance in distraught moments. An inferior feeling can be reversed to one of self-confidence by successful accomplishment of musical performance. It resocializes the disinterested introvert; it controls and coordinates the excessive energy of the extrovert.

Music should be used in every state hospital, not merely for general entertainment, but for specific, rational purposes as a method of treatment. On the theory that abnormal minds receive and magnify minor incidents in daily events to an exorbitant degree, the psychological value of music is in presenting tuneful stimuli to help create the best possible hospital environment, through carefully considered, appropriate selections.

RADIO

A central radio unit for the transmission of musical programs throughout the hospital is a valuable part of the daily program, providing it is used discriminately: for the meal hours, quiet, legato, smooth-flowing melodies; for the morning hours of industry on the wards and in the cafeterias, rhythmical, tuneful airs, not distracting, but conducive to concentration; for the hours of relaxation on the wards during the afternoon, low volume programs, if any; for early evening (patients retire very early), mixed programs, some popular numbers, some quieter features; for ward dances, using records on the broadcasting system, popular hits, polkas, waltzes, square sets; for special holidays — Christmas, Easter, patriotic occasions — appropriate selections; for inducement to attend services, there should be broadcasting of religious music just prior to the chapel hour each Sunday.

The portable radio offers limited selection but makes some provision for the bed patient's interest, and for that patient who prefers his own "brand" of music in a corner by himself. In the dental office, as patients are awaiting their "turn," restlessness and anxiety may be quieted by the use of appealing, musical programs.

VICTROLA RECORDS—PORTABLE MACHINES

Certain areas around the wards are out of reach of the broadcasts, and there are other reasons why better results may be attained by using portable victrolas and especially selected recordings.

During classwork periods on the wards, in the women's continued treatment and disturbed services, overtalkativeness can be diminished and concentration span improved by renditions of familiar, enjoyable tunes. These patients, with indefinite hospitalization, in the majority of cases over five years, are in need of "emotional liberation"* through closely supervised work treatment. There are many paranoids here, easily irritated, ego-centric; there are hypermanics, distractible, flighty. Music in the background indirectly influences their mood and behavior, and as attention is focussed on work performance there is less time for delusions to function.

During recreational periods indoors, when the program is planned so that a portion of time is allotted to a variety of activities performed by the members of the group simultaneously — viz. badminton, ringtoss, shuffle board, roller skating, jump rope, table tennis, etc., a musical background is an effective arrangement to help stimulate active participation. Music for this purpose should be entertaining but not raucous — the "Circus" album, Columbia G58, "Oklahoma," "Carousel," Victor Herbert orchestral recordings, "Accordion Capers," or string ensembles that are appealing and rhythmical.

The portable machines are especially useful to wheel through the wards to provide patients in the infirmary and the tubercular unit with favorite recordings. Lively compositions are often requested—martial music, polkas, familiar songs. The system works both ways—calming restlessness where quiet activity is called for, and enlivening lethargic temperaments who have no other inducement to indulge in exercise.

Sedative treatment by continuous baths is effective in acute manic delirium, insomnia, alcoholism, and agitation. The atmosphere and facilities for this form of hydrotherapy are

*Principles and Practice of Rehabilitation, John E. Davis, M.A., Sc.D. A. S. Barnes, 1943.

intentionally planned to induce relaxation and sleep — dim lights, water kept at skin temperature, fitted canvas hammocks, and covers. The use of music, subdued, legato strains, diminishing in volume as quietness appears, is a worthwhile addition to this form of treatment, for the purpose of turning attention away from rebellious feelings, or creating contented mental attitudes as body tensions relax.

Unless the chapel equipment includes an organ, the background music for religious services — preludes and postludes — can adequately be supplied by appropriate recordings on a good victrola-radio. This music, to give the fullest inspiring effect, should be produced at the intended volume spreading throughout the auditorium as the dominating occurrence at that part of the service. Prolonged diminishing tones will not rise above the habitual conversation and will not sway the mood nor attention of the members of the congregation in the direction desired.

The lasting effects of music may be illustrated by this story of the boy in uniform under hospital treatment for combat fatigue at a Marine base. His interest in listening to jukebox renditions was observed by a tavern barmaid who suggested to him that he could find lots of good records to listen to at a nearby library. The librarian gave him some guidance in selections of Schubert's symphonies and Verdi's operas, and after three months of this informal music therapy he confided, "The medics tell me I'm well enough for a discharge. The credit goes to the records — and to you." (From RECREATION, "Music to Take Home," courtesy of *Reader's Digest,* November, 1946).

ACTIVE PARTICIPATION

Programs in which patients may take an active part have important therapeutic value. These may be by vocal arrangements — ensemble singing, solos, choirs, quartettes; and by instrumental means — piano, violin, orchestra, rhythm bands. Most people can sing well enough to join in a songfest, and those patients who are reluctant at first to come into the group can be reached from a distance by familiar songs. The objective, of course, is to influence a socially acceptable attitude on the part of all. Vocal solos, quartettes, and piano solos give good opportunity for harmless ego-expansion, attainment of self-assurance by creative expression, and general entertainment for the group in hearing a member perform.

It is advantageous for the patient who has recently become hospitalized to be given an opportunity to maintain or develop her musical talents. It is a means by which a patient, during a period of remission, may renew her discarded interest. The convalescing lobotomy* patient, and shock therapy cases, who are known to have possessed musical talent at one time, should have the benefit of receiving an opportunity to express again, if possible, this musical ability as they progress through a re-educational stage in their habits of living.

Pianos should be at the disposal of patients on as many wards as possible. At present the public is very generous in donations of instruments for this purpose. Twelve pianos are available every day for patients in this hospital, all donated, besides three purchased pianos which are kept in condition for special weekly programs on the wards used with other instruments. The pianos that are left open get very hard usage, of course, and cannot be kept in repair. As more donations are received they replace those that are worn out.

Choir training, under careful, capable leadership, can have interesting results. The choir can be kept together with greater regularity of attendance, and, consequently, with a better feeling of accomplishment, if at least half of the membership is selected from the continued treatment service. This is because patients from the new admission group are apt to be more frequently on weekend home visits, or their hospitalization is of shorter duration, or their relapses into acute episodes occur more often. Regular rehearsal periods should be held, at which vocalizing exercises and study of two or four-part anthems are given. The choir group, attired in surplices, if possible, can thus help to complete a normal atmosphere for the chapel service.

Rhythm bands have two outstanding attributes — first, for the regressed patient, it gains attention through auditory sensation and involves simple, rhythmical procedure. Secondly, it may be used as a starting point educationally for patients who are able to progress

*Prefrontal brain operation.

and participate in orchestral work. The complete outfits for rhythm bands are quite inexpensive, and have been procurable from Ludwig & Ludwig, Chicago, the American Reedcraft Corp., N. Y. C., and J. L. Hammett Co., Cambridge, Mass.

Musical programs and entertainments, presented from time to time by community talent, such as band concerts, string ensembles, local choir groups, minstrels, vaudevilles, orchestras for dancing, have an important part in the hospital's recreational program. Here, too, a patient may be induced to demonstrate spontaneously his own musical ability. The benefit these programs bring is not merely an hour of happy entertainment, but a psychologic uplift attained by normal contact with people from the outside world, under the pleasantest of circumstances — a musical atmosphere. The more lasting these impressions become, the more helpful they are in resolving emotional conflicts.

There are numerous examples of plans and programs being used in psychiatric hospitals which demonstrate the effectiveness of music therapy.

After considerable experimentation, the conclusion was reached that the most effective plan for a ward program follows the general form of good entertainment anywhere: catch the attention of the audience with a fine rhythm and cheerful melody; get audience participation in group singing; introduce at least one composition of serious and inspiring character; use serene movements, both vocal and instrumental, toward the close; end with a song or hymn of confidence; and do all this within a time limit not so long as to tire the audience. Within this general frame, the march of the seasons, special days, special types of music, and considerable "appreciation of music" may be utilized. Program notes in the form of interesting items about the various compositions or instruments, and a light touch and cheerful tone throughout serve to hold attention and get response. Request numbers are encouraged, and patients are invited to contribute their own numbers, with some encouraging results.

The piano is the usual instrument on which a patient can perform. Several competent pianists have volunteered after attending the programs for some time. One patient has furnished his own compositions for group singing. A really hilarious "barber shop quartette" entertained in the men's ward, and then asked for the Doxology as the closing hymn. Some of these events are planned in advance, but the regular program is always flexible enough to give a place to any patient who is ready to participate.

A definite conclusion from this experience is this: good music presented by people who quite apparently are having a wonderful time doing so, creates a situation to which many patients can respond favorably. It "blesses him that gives and him that takes."

Program in a men's ward:

TRIO—flute, 'cello, piano—Serenade *Victor Herbert*
GROUP SINGING—Onward Christian Soldiers
TRIO—Serenade *Mozkowski*
GROUP SINGING—Medley of waltz songs
SOPRANO SOLO—My Hero
TRIO—My Lady Clo *Clough-Leighter*
GROUP SINGING—Swing Low, Sweet Chariot (spiritual)
SOLO WITH INSTRUMENTS—Danny Boy—
Londonderry Air
TRIO—Told at Twilight *Huerter*
SOLO AND CHORUS (group)—Bells of St. Mary's
GROUP—God Bless America

Program for a mixed audience:

GROUP SINGING—America the Beautiful
FLUTE AND PIANO—Turkey in the Straw *Arr. Guion*
SOPRANO SOLO—Over the River and through the wood
FLUTE SOLO—Sonata for flute *Handel*
REQUEST SONGS—from audience
PIANO SOLO—Four short waltzes played by a patient
SOPRANO SOLO—Kerry Dance
REQUEST SONGS—from audience ending with
Hymn—Little Town of Bethlehem

A Christmas program:

GROUP SINGING—accompanied by instruments—
Deck the Halls
GROUP SINGING—of five Carols
PIANO SOLO—Carillon from L'ARLESIENNE *Bizet*
SOLO (soprano)—Santa Claus is Coming to Town
flute obbligato, group chorus
SOLO—White Christmas, group chorus
TRIO—flute, 'cello, piano—Meditation *Pache*
SOLO WITH INSTRUMENTS—O Holy Night *Adam*
GROUP SINGING—of three Carols

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Kellogg Foundation and Field Secretaries

Many of the benefits that have derived to our association have been made possible by the Kellogg Grant which provided the services of an Educational Field Secretary.

The grant, given on April 1, 1944, has a limited term to run; maintenance of the office of Field Secretary men will be our responsibility. We express our appreciation both to the Foundation and to the excellent secretaries who have enabled our profession to make such rapid advancements in the last three years.

The W. K. Kellogg Foundation was established in 1930 by the cereal manufacturer for "the welfare of mankind without regard to race, creed, color or nationality." Its activities have been primarily in the health education field with particular emphasis upon improvement of rural areas.

With the advent of the war, projects which would offer direct contributions to the war effort were subsidized. A series of grants were made to schools and colleges throughout the country for student loan and scholarship funds in the health sciences. These grants were for the training of physicians, dentists, nurses, physiotherapists, occupational therapists, radiologists, medical technologists and public health personnel.

It was under this program that assistance was given to the A.O.T.A. The aspects of this grant were somewhat different from those in other fields in that it was the only direct grant for recruitment purposes, although in the case of medical technologists the publication of a pamphlet was subsidized to be sent to prospective students.

Through the Kellogg Grant, we have learned the value of an Educational Field Secretary's work. We hope the Association will be able to finance the maintenance of this office in the years to come.

SUE P. HURT, O.T.R.

When Sue P. Hurt was growing up in Richmond, she was sufficiently interested in baseball and football that the thought of her future was not heavy on her mind. However, her interest shifted as she entered her teens and she began to study music. Her success in this was such that she did choir work and played a church organ, and went on later to study piano with F. Lexington Harker who was a pupil of Tertius Nobel.

The thread of this interest is still woven into her busy life today. It was difficult to find convenient musical outlet in the city, so a few years ago, when she was on a summer vacation in Massachusetts, she borrowed an accordion and went off by herself into the woods to practice and learn. She is now an accomplished player and a joy to her friends.

Carrying through with her interest in sports, she entered the Richmond School of Social Work (later R.P.I.) of the College of William and Mary, and took up Recreation and Physical Training. It was here that she began to think about O.T.

While in the library one day, she picked up a book on Handicrafts for the Handicapped, and then and there she determined that some day she would study to become an occupational therapist. This was not to take place until after she had done settlement work in Washington and New York.

In 1932, her educational objective was reached when she graduated from the Philadelphia School of Occupational Therapy. Her first O.T. job was as a lone therapist at the Reconstruction Hospital in New York City. From here she went to the Westbrook Sanatorium, a psychiatric institution in Richmond.

This was a brief stop for she was soon called to serve as director of the Junior League Curative Workshops at Johns Hopkins Hospital and the University Hospitals at Baltimore.

While at Johns Hopkins she spent a summer in Boston taking the course in physiotherapy at Harvard Medical School under Dr. Arthur T. Legg and Janet B. Merrill.

In 1940 she resigned from her position in Baltimore to join the staff of the Philadelphia School of Occupational Therapy. Before she had completed this change, however, family events called her back to Richmond.

While there, her work at the Crippled Children's Hospital in Richmond was interrupted by her travels as a visiting lecturer to Boston and other points. World War II was coming along then and Richmond Professional Institute decided to include an occupational therapy department. In 1942 Miss Hurt accepted the responsibility of organizing this department and became its director.

As she points out, she was allowed to do something then that would not be acceptable now—despite her experience and education, she did not have her degree so she "hustled up" and took her credits, and graduated with some of her own students. As if this were not sufficient extra effort, she went to Columbia University in the summer of 1943 and took the Survey of Rehabilitation Course. She is proud of the fact that in addition to graduating their own R.P.I. students during the War, they were able to train approximately 55 students in their War Emergency Course.

It was Sue's intention to start studying for her Master's Degree last year, but the National Office needed an Educational Field Secretary and it wanted Sue Hurt for that post. Feeling that this would be a liberal education in itself, Sue accepted. As soon as her duties are completed (she agreed to serve for a period of only one year) she goes to St. Louis to direct the Occupational Therapy School at Washington University.

We feel that no mention should be made of Miss Hurt without including a word about her brother. He is bigger than Sue, and a Doctor in the bargain.

Cornering Sue Hurt long enough for an interview is a difficult thing to do—she is a fantastically busy small person with a myriad of interests and sound ideas, who is one of the foremost O.T.'s in the Physical Injuries field.

HENRIETTA McNARY, O.T.R.

Where's Henry? OT's who know Henrietta McNary have often voiced that question at the anxious moment of train time, or plane time, or even at meeting time. And Henry —quiet, unruffled, completely composed—usually arrives at the exact melodramatic moment.

Henrietta does not affect such garrison finishes with time schedules. They occur only because she is busy with the full gamut of work and play which she crowds into her life.

The more involved the project is, the more anxious she is to see it to conclusion. For instance, when she was living in Cleveland, she decided that one of the great needs of the walk-up apartment which she shared was a brick fireplace. Six hundred bricks were lugged up to the living room and assembled into a combination fire place and book shelf.

Back in her earliest days as a native of Milwaukee, her family maintained an active and personal interest in horses. Henry not only became an accomplished equestrienne, but went the whole way by raising, breaking and training a colt. More recently she has added sculpture to her list of hobbies, one of her pieces being a marble figure fashioned from a step salvaged from the old Milwaukee court house.

Henrietta McNary took her B.S. in Arts at Milwaukee-Downer College in 1927. During her college years, she became interested in the occupational therapy course offered and after completing her Bachelor work, went on to earn a diploma in O. T. in 1928. She also pursued graduate work at Northwestern University and Western Reserve University.

Her first work in the field was a Supervisor of Occupational Therapy at the Curative Workshop in Milwaukee. Here her interest in the

work and her preliminary training combined with her wide range of hobbies and aptitudes to launch her fully on a successful career.

In 1930 she accepted the post as Director of the Curative Workshop at Northwestern University Medical School in Chicago, Ill. In this position she was also a member of the University faculty.

Five years later she moved to Cleveland, Ohio, to serve as director of O. T. and P. T. at the Association for the Crippled and Disabled. This unit has since become known as the Rehabilitation Center. During her term in this city she also lectured at Western Reserve University.

In 1940, she was recalled to Milwaukee-Downer College to accept the duties of Director of the Department of Occupational Therapy. In this capacity she serves as Professor, occupying the Horace A. J. Upham Chair of Occupational Therapy. She is presently on leave from her Professorship serving as Educational Field Secretary of the American Occupational Therapy Association.

Henrietta is the oldest of a family of four children, including one brother. With her enthusiasm and energy in her chosen field, she sets them an example which is conceivably difficult to follow.

MARJORIE FISH, O.T.R.

From the time in her early school days when she first felt the desire to become an occupational therapist until today when she so capably serves as Director of Student Training in Occupational Therapy at the College of Physicians and Surgeons, Columbia University, New York, Marjorie Fish has crowded a million valuable and constructive experiences into her life.

Equipped with a degree from Swarthmore and enriched in experience by a succession of positions which gave her personnel and economic training, she enrolled in the Boston School of Occupational Therapy in the fall of 1932.

Her practice teaching gave her insight into many problems, and perhaps it was this portion of her experience which formulated her thesis that a therapist must think of her patient as "a medical problem with a social and economic background. But the work the patient is taught to do must be planned as if he were an economic problem with a medical background."

Following her graduation from the Boston School, she served the summer as a substitute therapist at the Yale Institute of Human Relations. Her first major job followed at the Danvers, Mass., State Hospital as director of the department. Three years later she returned to the Boston School to serve as Assistant Director and Field Secretary.

Her obvious qualities of organizing and evaluating people and things, combined with her active interest in A.O.T.A. affairs, brought her the position of Speaker of the House of Delegates. When the day came that the Association needed an Educational Field Secretary, Marjorie Fish was named to this pioneer post.

Standards she set in this work have been all to the credit of the Association, but they were simply Marj Fish at work. Thorough, attentive, far-seeing, she gave the organization an incentive and impetus which will carry for many years to come.

Advancement to chairman of the Educational Committee of A.O.T.A. was the next logical step in her contribution to the serious needs of the profession and recognition by the Association of the contribution she could and would make.

She now serves as First Vice President of the American Occupational Therapy Association, is a member of the Executive Committee, and gives much of her time from her busy duties at Columbia. She also is president of the New York O.T. Association.

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EDITOR ..... Charlotte D. Bone, O.T.R.
ASSOCIATE EDITOR ..... Katharine Rand, O.T.R.
PUBLISHER ..... Shepley Cleaves

EDITORIAL

The resignation of Mrs. Meta R. Cobb, O.T.R., as Executive Secretary, after nine years of devoted interest and endeavor in behalf of our association, will be felt individually by those who knew her personally, and in more remote ways by those who knew only the services rendered by the national office. When Mrs. Cobb became our Executive Secretary in 1938, the membership which now numbers 2771, was 865; the requests for her services have increased in proportion to this growth, and they have been so varied to meet the demands of individual members, that each of us will, in her own way, experience a sense of loss.

With Mrs. Cobb's resignation, it became incumbent upon the Board of Managers to discuss her successor at the recent meeting in Philadelphia.

There is not one of us who does not recognize the strength and leadership ability of our president. Officers and Board think there would be wisdom in having the Association utilize her talents and abilities to the fullest measure — this is the time when her services could be of the most value to the Association, and it is also the time when her recent experiences best fit her to fulfill our needs. The membership unanimously voted an occupational therapist into the office of president, not only because they wanted her as a person, but because she embodied all the O.T. characteristics which they felt were needed in their leader — but she has not been provided full scope and opportunity to use the very qualities upon which she was elected and which she possesses in such generous measure. We assumed that with her capabilities she could manage the super-human task of directing a large hospital department while at the same time conducting Association affairs for the country. This she has done so well that it has been easy for us to be satisfied, without looking further ahead to observe the benefits which could derive from a concentration of her efforts for the Association.

Article V, Section 7 of our Constitution, states that the Executive Committee, subject to the approval of the Board, is empowered to employ an executive secretary who shall act as the business manager for the Association. Mrs.

Kahmann has been asked to assume this position and has expressed her willingness to do so if it is the wish of the membership who voted her into the office of President. All members have doubtless received by now the special letter from the Executive Committee regarding this. If Mrs. Kahmann resigns as President, as would be necessary if she assumes the new responsibility, this elective office will be left vacant and the Nominations Committee will present a new slate at the Annual Meeting in October.

That the active interest and participative support of each individual member of the state associations has a telling effect is demonstrated by an analysis of the actions taken by the Board at their recent meeting. Many of their decisions were the direct result of recommendations made by the House of Delegates, the members of which are instructed by the state associations which they represent. At this same meeting, it was interesting to us to observe also the valuable and necessary work being accomplished by the various committees, albeit sometimes with overlapping of responsibility and purpose. Through their efforts, studies, and findings, they were able to make numerous recommendations upon which the Board could act.

It is difficult to demonstrate specifically the services of some of these national committees without which we would be unable to function as an organization, and which benefit each occupational therapist, no matter where she may be. We can point out the more obvious facts—that ours would not have been a profession at all unless standards had been set up and unless someone had taken the responsibility of making us an organization; it has required the work of more than one individual to make this profession a truly medical one; many members would have been deprived of an opportunity to practice their profession as an acknowledged part of the World War II medical team had it not been for the concentrated effort of interested O.T.'s to obtain original recognition; occupational therapy and its treatment programs would be on the World War I level today if many, many members had not been working constantly toward higher ideals and standards, and if the teaching centers had not been keeping abreast of the advancements of the medical profession. There is little likelihood that we can advance and develop now without the same sort of planning and effort exhibited in the past, but with more members from which to draw, our scope should be broadened. The national organization does for us those things which we cannot, by lone effort, accomplish.

Most of us are aware that our national dues and registration fees are small in relation to those of similar organizations. This income was sufficient when the membership was such that our needs could be met by a few workers in the national office. The expansion of the organization in numbers has not been accompanied by a comparative increase in income, but the demands of the membership on the national office have increased and become diversified in ratio to the growth and new ramifications of occupational therapy itself. As a result, the services of the Association to its members have had to be spread thinner and thinner, and when all costs have been steadily rising, our operating funds seem even smaller for they can bring less advantages.

It is a dangerous situation to have this occur in a period which could be one of development and when strength and unity are of utmost importance, for the benefits of belonging to a professional organization can be dispersed as easily through insufficiency of funds, as from poverty of interest. The gain and assistance which can accrue to us individually, as well as to the profession, will be in relation to the amount we vote for national dues, so thoughtful consideration should be given to the question when it is presented by the delegates at the state meetings.

It was the vote of the membership that the A.O.T.A. office be moved to a mid-West location, and the change to Chicago will be accomplished after the November AOTA meeting if the efforts of the Executive Committee to find suitable space bear results.

The gift of $1000 which was announced at the recent Board Meeting is one for which the Journal, on behalf of the membership, wishes to express great appreciation. It was a contribution from a member of our Association who wishes to remain unidentified, but whose interest in the furtherance of the Educational Research Program prompted the generous gift.

Dr. W. G. Westmoreland, as a member of the A.M.A. Council on Medical Education and

Hospitals, has done much to bring about coordination between O.T. and P.T., to advance the actual standards of occupational therapy, and to promote the understanding and recognition of these standards by other medical professions. His acceptance of the executive secretaryship of the College of American Pathologists, Chicago, Illinois, is one which we announce with selfish regret, for his untiring efforts in our behalf, and his wise counsel in meetings have made him an invaluable ally and friend.

It has been brought to our attention that there are instances existing where members of our profession are advertising their services as occupational therapists, and that literature which is being circulated indicates they are functioning independently of medical supervision.

O.T.R. after a name signifies that the user is a member of a medical team, and in keeping with medical ethics, does not advertise her services. As a member of A.O.T.A., through which she is entitled to use the insignia, she will not practice her profession except under medical prescription or supervision. To fail in this is detrimental to the profession which she has chosen to serve, and either procedure should be grounds for action by both state and national associations to which she claims membership.

Shall the 1948 Convention be held in the autumn in New York City or on Michigan's Mackinac Island in the summer? Mrs. Lucie Spence Murphy, O.T.R., Assistant Director of Occupational Therapy at Milwaukee-Downer College, Milwaukee, Wisconsin, who is Permanent Convention Chairman, wants your answer.

We have had several letters from members asking about the listing of groups which will appear in the Journal. The issue preceding the Convention will contain the full revised lists of the names and addresses of officers; schools; executive, board, and committee chairmen.

In the last issue we told you that we hoped to have a Canadian and an English representative on our editorial board. We are happy to call your attention to the fact that Dr. Ruth Franks, editor of the Canadian Journal of Occupational Therapy, will represent that country. We have not yet heard from the editor of the British publication.

Lucy Morse to Establish O. T. Program in Hospital at Vlasim, Czechoslovakia

Lucy Morse, O.T.R., for the past 16 years on the staff of the Mass. General Hospital, Boston, has left this country for Czechoslovakia where she has been commissioned in conjunction with representatives of other medical fields to set up a convalescent program in a new hospital in Vlasim.

Lucy Morse, O.T.R.

She received her assignment from the Unitarian Service Committee which is carrying out the project at the request of the Czechoslovakian government. Working with her will be a Physiotherapist, and after the program has been established, a Doctor will come over to spend two months as a consultant on the program. Equipment for the department has been assembled in this country, and the complete plan includes the presentation of a teaching program.

After the project is complete and underway at Vlasim, a similar program is to be established in a modern factory hospital. It is estimated that between eight and 12 months will be required to carry out the work.

Lucy Morse has been a member of A.O.T.A. since 1924 and has served on a number of committees including exhibits, nominating and study. From 1941-46 she served as Chairman of Research, and she has served at different times as a Delegate and an Alternate Delegate. She has also been active in her State Association, being a former Board member and former Vice President.

She was one of the original 26 persons who took the first Civil Service exam ever given in New York State for O.T. and had worked at King's Park, L. I., Worcester, Mass., State Hospital and the Tewksbury, Mass., State Infirmary in addition to her service at M. G. H. in Boston.

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Permanent Convention Committee
Lucie Spence Murphy, O.T.R., Chairman
Sue P. Hurt, O.T.R. Ruth Robinson, O.T.R.
Margaret S. Rood, O.T.R. Jane E. Myers, O.T.R.
Incoming State Convention Chairmen
Marion Davis, O.T.R.
Arlene Van Derhoef, O.T.R.

Public Relations Committee
Holland Hudson, Chairman
Sue P. Hurt, O.T.R., Professional Advisor

Sub-Committee on News Letter and Directory
Edith Brokaw, O.T.R., Chairman
Meta R. Cobb, O.T.R.

Sub-Committee on The American Journal of O.T.
Charlotte D. Bone, O.T.R., Chairman

Sub-Committee on Reprints and Exhibits
Chairman not named

PUBLIC RELATIONS

Sub-Committee on Finance
Mrs. Guy Misson, Chairman

Exhibits Committee (Chairman not named)

Sub-Committee on School and Curriculum
Sub-(sub) Committee on Curriculum Guide
Henrietta McNary, O.T.R., Chairman

Registration Committee
Alice Letchworth, O.T.R., Chairman
Edith Brokaw, O.T.R. — Helen Mathias, O.T.R.
Marjorie Fisher, O.T.R. — Virginia Scullin, O.T.R.
Isabel March, O.T.R.

Sub-Committee on Examinations
Sue P. Hurt, O.T.R., Chairman — Advisors
Elizabeth Jameson, O.T.R. — Everett Elwood
Rhoda Lester, O.T.R. — Ruth Robinson, O.T.R.
Helen S. Willard, O.T.R. — Wilma L. West, O.T.R.

Scientific Study and Research Committee
Carlotta Welles, O.T.R., Chairman

Sub-Committee on Bedside Projects for Men
Borghild Hansen, O.T.R., Chairman

Sub-Committee on General O.T., Physical Function
N. Meryl Van Vlack, O.T.R., Chairman

Sub-Committee on Neuropsychiatry
Mrs. Elsa H. Hill, O.T.R., Chairman

SPECIAL COMMITTEES

Nominations Committee
Ella V. Fay, O.T.R., Chairman
Mary D. Booth, O.T.R. — Elizabeth Jameson, O.T.R.
Dorothy Flint, O.T.R. — Eva M. Otto, O.T.R.

Research Committee on Poliomyelitis
Sue P. Hurt. O.T.R., Chairman
Charlotte D. Bone, O.T.R. — Lucy Morse, O.T.R.
Marjorie Fish, O.T.R. — Eva M. Otto, O.T.R.
Henrietta McNary, O.T.R.

Rules and Procedures Committee
Marjorie B. Greene, Chairman
Marguerite Abbott, O.T.R. — Henrietta McNary, O.T.R.

HOUSE OF DELEGATES COMMITTEES

Handbook Committee
Bertha J. Piper, O.T.R., Chairman

Credentials Committee
Edna-Ellen Bell, O.T.R., Chairman

DELEGATES

Speaker of the House ..... Clare S. Spackman, O.T.R.
Vice Speaker ..... Bertha J. Piper, O.T.R.
Secretary ..... Edna-Ellen Bell, O.T.R.

California, Southern
Miss Elsie W. Geerts, O.T.R.
Director of Occupational Therapy
Camarillo State Hospital, Camarillo, Cal.

California, Northern
Miss Mary Booth, O.T.R., Assistant
Professor in Occupational Therapy
San Jose State College, San Jose 14, Cal.

Colorado
Miss Anne L. Reinecker, O.T.R., Dir. O.T.
The Children's Hospital
1738 Gilpin Street, Denver, Colorado

Connecticut
Miss Bertha J. Piper, O.T.R.
Director of Occupational Therapy
Fairfield State Hospital, Newtown, Conn.

District of Columbia
Miss Violet H. Corliss, O.T.R.
Upshur Street Tuberculosis Hospital
Upshur and 14th St., N.W., Washington, D. C.

Hawaii
Miss Marian Ballou, O.T.R.
51 Livermore Road
Wellesley Hills, Mass.

Illinois
Miss Isabel March, O.T.R.
University of Illinois Hospitals
1853 W. Polk Street, Chicago 12, Ill.

Indiana
Miss Dorothy Richardson, O.T.R.
Rotary Convalescent Home, Riley Hospital
Indianapolis 7, Indiana

Iowa
Miss Helen Jordan, O.T.R., Dir. O.T.
Bishop Clarkson Memorial Hospital
Omaha, Nebraska

Kansas
Miss Myrl Anderson, O.T.R.
The Meninger Sanitarium
Topeka, Kansas

Maryland
Miss Muriel E. Zimmerman, O.T.R.
Kernan Hospital for Crippled Children
Baltimore, Maryland

Massachusetts
Miss Jane Merrill, O.T.R., Dir. O.T.
Rhode Island Hospital
Providence, R. I.

Michigan
Miss Marion R. Spear, O.T.R., Dir. O.T.
Kalamazoo School of O.T. of Western Michigan
College of Education, Kalamazoo 45, Mich.

Minnesota
Miss Martha Emig, O.T.R., Dir. of O.T.
Ah-Gwah-Ching State Sanatorium
Ah-Gwah-Ching, Minnesota

Missouri
Miss Dorothy Flint, O.T.R., Acting Dir. O.T.
Washington University School of Medicine
5467 Scott Avenue, St. Louis 10, Missouri

New Jersey
Miss Naida Ackley, O.T.R., Dir. O.T.
New Jersey State Hospital
Trenton, N. J.

New York
Mrs. Harriet J. Tiebel, O.T.R.
7 Madison Street
Port Washington, L. I., New York

New York, Western
Miss Cornelia Smith, O.T.R., Senior O.T.
Willard State Hospital
Willard, Seneca Co., New York

Ohio
Miss Eva M. Otto, O.T.R.
104 Arps Hall, Ohio State University
Columbus 10, Ohio
Pennsylvania
Miss Clare S. Spackman, O.T.R., Dir. Curative Workshop
Philadelphia School of Occupational Therapy
419 South 19th Street, Philadelphia 46, Pa.
Pennsylvania, Western
Mrs. Bessie Clark, O.T.R.
Director of Occupational Therapy
Veterans Hospital, Aspinwall, Pa.
Texas
Miss Lenore Brannon, O.T.R., Chief O.T.
U. S. Public Health Service Hospital
Fort Worth, Texas
Virginia
Miss Mary Junkin, O.T.R., Director
Curative Workshop
101 N. Jefferson St.
Richmond, Va.
Washington
Miss Edna-Ellen Bell, O.T.R., Dir.
Occupational Therapy & Rehabilitation
College of Puget Sound, Tacoma 6, Wash.
Wisconsin
Miss Ruth Bell, O.T.R.
Good-Will Industries
2102 W. Pierce St., Milwaukee 4, Wis.

BOARD MEETING

Philadelphia, March 17, 1947

(See next issue for official reports)

Our total membership as of March first is 2771 — an increase of 258 since the 1946 Annual Meeting last August.

Requests for occupational therapists to fill positions other than in hospitals is increasing. In the hospital area the largest number of requests have been from orthopedic, mental, and general fields. Inquiries about occupational therapy from other countries are increasing.

We may expect the new Year Book or Registry in May.

Several new state associations are being formed and others are undergoing reorganization. (There are 25 state or regional associations at present.)

The House of Delegates recommended that (1) the national office be moved to the Middle West if this appears best for the functioning of the Association; (2) dues and registration be raised to meet the current increases in expenses; (3) to eliminate confusion, national dues and registration be collected entirely through billings from the A.O.T.A. office rather than partially through the state associations; (4) with increase in funds, the national office should improve its services.

In accordance with the recommendations which represent the thinking of the membership, the Board moved that the Executive Committee be empowered to transfer the national office to the Mid-West, the exact location of which will be dependent upon the findings of the Committee. The Board also moved that the question of the AMOUNT of dues and cost of registration for 1948 be referred to the House of Delegates and the state associations for further study so that action may be taken at the Annual Meeting in November. It was further moved that all fees pertaining to A.O.T.A. be billed through that office.

The Board approved the recommendation of the Educational Steering Committee that Miss Wilma L. West, O.T.R., be named to succeed Miss Sue P. Hurt, O.T.R., as Educational Field Secretary, this position to be assumed not later than September first. Miss West was approached a year ago but unable to accept the position because of her previous commitment to the Baruch Grant. Because the St. Louis School of Occupational Therapy at Washington University generously allowed Miss Hurt to postpone the assumption of her duties there as director, we have enjoyed the benefit of Miss Hurt's experience and able leadership during this year.

The schools will receive the numerical rating of their graduates in the recent registration examination. The past weight given to clinical training in these examinations has been 15%. It was recommended by the Sub-Committee on Schools and Curriculum that this be raised to 25%, and increased further as soon as the clinical training reports have been made absolutely valid. The Sub-Committee on Clinical Field Training recommended a balance of 20% until further study of evaluation reports and rating scales make it feasible to give clinical training a weight of 33 1/3%. It was moved that the recommendation of the Sub-Committee on Clinical Field Training be accepted. Both committees were in accord that the didactic portion of training should receive weight em-

phasis since the examination is to test the students' qualifications for ENTERING the practicing field, rather than to test for the knowledge and learning which can be gained only through practical experience.

A total of 1149 persons have passed the registration examinations without retakes; 107 have failed but of these 67 took retakes and passed.

It was announced that a gift of $1000 had been received from an unnamed member of the Educational Committee for the continuation of the Educational Research Program. Sincere gratitude was expressed by the Board of Managers for this generous gift and it was recommended by the Educational Field Secretary that this sum be used to carry forward a new project, rather than to finance the completion of any of those which are now under way.

The membership had been asked in a News Letter to make known its preference of subject for the Convention Institute. It was announced that Psychosomaic Medicine had been chosen and that Miss Carlotta Welles, O.T.R., Director of Occupational Therapy at the Curative Workshop of San Francisco, would be the Institute Chairman. Preference was also indicated by the membership for the Institute to be held for two or three days following, rather than preceding, the Annual Meeting.

The Educational Field Secretary reported on the accomplishments and projects of that office. The revision of the Handbook of Occupational Therapy, which was inaugurated by the House of Delegates and the Education Office, has been completed and is obtainable for a dollar from the national office. An effort is being made to build up the Library in the national office so the membership may be made aware of good texts and reference material. Plans for a Skills Survey are now under way. The Secretary has been working with other committees on the development of Work Report Forms, Uniform Clinical Training Reports, and Essentials of a Clinical Training Program, the latter of which will ultimately provide a basis for accrediting. Charts showing present and envisioned development of the Educational Research Program indicate our need for further study and research. The survey forms sent annually by the American Medical Association to schools of occupational therapy were revised and expanded in the Educational Office before distribution to the schools by the A.M.A. It was recommended by the Executive Committee that the Physical Injuries Syllabus, to be prepared as a result of the Physical Injuries Institute in Chicago, be postponed for the present.

The American Physiotherapy Association and the American Occupational Therapy Association are working together in regard to the legislative problems of the two organizations. We have authorized action and appropriated $1000 for legal advice as necessary toward legalization in two states.

Dr. Westmoreland, who is soon to leave the A.M.A. office as a member of the Council on Medical Education and Hospitals, has recommended that the A.O.T.A. visit and evaluate occupational therapy schools, making its recommendations for accreditation to the A.M.A. Miss Henrietta McNary, O.T.R., as Co-Chairman of the Educational Steering Committee, was named to represent the Association in this, and she will visit within the year the four schools which are, or will be, ready for approval: College of Puget Sound, College of St. Catherine, Texas State College for Women, and University of Wisconsin.

It was moved and seconded by the Board that the recommendation of the Educational Steering Committee be accepted that a letter and token of appreciation be sent by the Association to Dr. Westmoreland for the invaluable advice, guidance and wise counsel which he has given "beyond the call of duty" to our Association, and for which we feel greatly indebted.

As vacancies occur by changes or rotation of membership, clinical training directors will replace school directors until the Educational Steering Committee is made up of an equal number of representatives of each group.

A Sub-Committee of Schools and Curriculum has been named to develop a Curriculum Guide from the topical outlines which were prepared by a survey group of specialists in the national office this winter. These outlines were sent to all schools for comments previous to this meeting, and they have been discussed and further revised by each of the committees meeting here. Factual detailed outlines will be prepared by the specialists on recommendations made by Miss McNary, who was the originator of the

plan and who is chairman of this committee.

The Sub-Committee on Clinical Training is revising its Guide for Clinical Training Centers, is working on The Essentials of Clinical Field Training, is preparing a Students Manual on Clinical Field Training, and is developing a Student Rating Form.

The Registration Committee reported that of our 2771 members, 2144 are registered and in good standing, and of these, approximately 1500 are in active practice. 200 persons are registered who are not members of the Association.

The Research Committee pointed out that it plans to have its projects represent the thoughts and problems of a maximum number of therapists and that its efforts will be directed toward the development of material which cannot be easily secured from books. The results of their findings, represented in written material or by drawings or pictures of adapted equipment, will be published in A-JOT.

The planning for graduate study, which was an original part of the Research Committee program, has been transferred to the Sub-Committee on Schools and Curriculum.

The aim of the Permanent Convention Committee is to plan convention locations two years in advance so the Association will have a selection of hotels in the desired part of the country at the time most convenient for therapists to attend, and so that the membership will be able to make plans in advance.

The Convention rates at the Hotel Del Coronado are $19.50 per day, American plan, for two persons in twin bedrooms with bath; $10.25 and $11.25 per day, American plan, for rooms singly occupied. Living rooms are $6.00 per day in addition to the bedroom charge. Frequent auto ferries make it possible to stay in San Diego and still attend the Convention.

The membership is to be asked their preference for the location of the 1948 Convention —New York City in the Fall, or Mackinac Island in Michigan in the Summer.

Progress Reports of the Rules and Regulations Committee and of the Journal Committee were read.

It was with sincere regret and with a very real sense of loss that the Board of our Association accepted the resignation of Mrs. Meta R. Cobb, O.T.R., as the Executive Secretary of the A.O.T.A. Her contributions in the last nine years have been invaluable, both in service to the membership and in representing our association to allied groups. She will be missed by all but particularly by the officers and executive committee whom she served so ably and by committee chairmen to whom she was a never ending source of helpful information. It was necessary, with Mrs. Cobb's resignation, for the Board to discuss her successor, and Mrs. Kahmann was asked to become Executive Secretary or Administrative Director of our Association. She expressed her willingness to do so, if it is the wish of the membership-at-large. It was moved that a letter be sent to the entire membership from the Executive Committee, advising them of the situation, and to get their reactions before the June Executive Meeting.

COMMITTEE REPORTS

SCIENTIFIC STUDY AND RESEARCH COMMITTEE

Carlotta Welles, O.T.R., Editor

The contemplated program and general concepts of your Research and Scientific Study Committee were outlined in the February issue. The Sub-Committee on General and Physical Function has now undertaken a project which promises to be of value to every practicing therapist. In cooperation with "World War II Occupational Therapists" a manual of adapted equipment is being prepared. Those who are now, or who have been, occupational therapy directors in military hospitals have been contacted individually by letters, and have been invited to assemble material which is concerned with either standard equipment or specially built equipment which they have found of value. Therapists in civilian hospitals are being contacted by the delegate from their state association, who is also a Reporter for the Journal. It is believed, however, that the usefulness of this manual will be measured by its completeness, therefore the details are given again here so that all may refer to them.

Drawings of adapted games and equipment must be clear and well labelled showing construction and functional details. Explanations

indicating when and how the adapted projects are used should be typewritten double space on one side of a standard sheet of paper. Glossy photographs will be included wherever possible. This material should be sent to the Chairman of the Sub-Committee on General and Physical Function, Miss N. Meryl Van Vlack, Chief Occupational Therapist, Billings Veterans Hospital, Indianapolis, Indiana. Before publication in the manual all material will be reviewed and edited by specialists from the several fields. Sample material will be printed occasionally in AJOT, prior to the publication of the manual.

It is hoped that this manual will include a complete representation of adapted games and equipment. In our eagerness over bicycle saws and treadle machines we must not overlook the equipment made and used in the children's, general, tuberculosis, homebound, blind, and other fields. Each of you is invited and urged to send in material for only with the help of everyone will this manual be of value to you and to all.

LEGISLATIVE COMMITTEE

Editor, H. Elizabeth Messick, O.T.R.

1. Since the last report from this Committee, several inquiries have been received concerning suggestions for writing occupational therapists job descriptions in connection with State Civil Service.

It should be pointed out that all Federal and perhaps most State Civil Service positions are being reallocated and new standards established. It is, therefore, important that occupational therapist position requirements be so established as to require basic medical knowledge and allow sufficient latitude for exercise of independent judgment under the heading of "duties and responsibilities."

It must be borne in mind that the position must first be established as pointed out above and then the qualifications of the individuals to fill the positions outlined. State and regional associations should assume the responsibility for this in their own state. Sample job sheets are available in the National Office and this committee will endeavor to assist you with your problem if you will give us sufficient information.

2. New legislation has been introduced in the 80th Congress to commission occupational therapists. A Bill, H. R. 1943, was introduced on February 13, 1947, "To establish a permanent Nurse Corps of the Army and Navy and to establish a Women's Medical Specialist Corps in the Army." The W.M.S.C. will consist of three sections, a Dietitian Section, a Physical Therapist Section, and an Occupational Therapist Section.

This legislation passed the House on March 13, 1947, and was referred to the Senate.

3. The Maryland Occupational Therapy Association has joined the Maryland Chapter of the American Physical Therapy Association in an attempt to effect legislation at the state level.

DELEGATES DIVISION

Miss Bertha J. Piper, O.T.R., Editor

INDIANA

Delegate-Reporter, Dorothy Richardson, O.T.R.

Meetings: The I.A.O.T. met bi-monthly during the year 1946. These meetings combined general business with a planned program. At the January meeting Miss Frances Stakel, Chief Therapist at Billings General Hospital, presented a film entitled "Occupational Therapy and Physical Therapy at Billings General Hospital." This was an excellent color movie on the correlation of these two types of treatment.

The March meeting was held at Indianapolis City Hospital. Miss Mary Paxton, Acting Executive Secretary of the Indiana Society for Crippled Children, talked about the scholarships which that society offers to Indiana girls who are interested in Occupational Therapy as a profession. At the same meeting the staff from Wakeman General Hospital, Camp Atterbury, Indiana, gave a demonstration on the use of plastics as a treatment medium.

Our next meeting, which included a program as well as business, was held in September. This was a joint meeting with the Indiana Physical Therapy Association, and it was held at Wakeman General Hospital. The Director of Physical Therapy at Wakeman gave a very interesting demonstration on weight resistance exercises in the treatment of orthopedic disabilities. At that time the Occupational Therapy Department had a correlative program which was

being used in conjunction with this type of exercise. Unfortunately the hospital closed before any definite results could be formulated. The other program meetings included a demonstration of ceramics by a representative of The American Art Clay Company and an enlightening demonstration of sound movies and their use in hospital programs.

Money Raising: The normal membership of the Indiana Association fluctuates between 20 and 25 active members plus 10 to 12 associate members. This means that our financial resources, as realized from dues collected, are not adequate to meet our yearly expenses. Therefore, of necessity, we must find other channels for additional revenue. For the past three years we have held Rummage Sales, either in the fall or the spring, in the Occupational Therapy Department at Riley Hospital. These sales have been so successful financially that we have accepted them as our yearly money-making project. Members and friends keep the project in mind and save all their unwanted clothing, household articles, and gadgets, from one sale to the next. The sales are great fun and our customers, the hospital personnel, look forward to them each year.

Publicity: The Publicity Committee of our Association cooperated during the year with the city and county schools in their Career Programs for Girls. An illustrated lecture on Occupational Therapy was prepared by the committee and various members of the association were assigned to present this material to the schools. Each student attending a lecture was given literature on Occupational Therapy as well as an invitation to visit one of the Occupational Departments in Indianapolis. The response from the students to these programs was very gratifying.

State Service: The State of Indiana has the Merit System for hiring all personnel. This system operates in the same manner as Civil Service. At the present time there are only three occupational therapists hired under this system. We know from a recent survey made by our association, that as soon as therapists are available, more occupational therapy personnel will be hired in accordance with the Merit System Standards.

Election: The officers of the I.A.O.T., elected in January to take office May 1st, 1947, for a term of two years are:

President
Miss Mary Mayer, O.T.R.
Indianapolis City Hospital

Vice-President
Miss Joan McCord, O.T.R.
Indianapolis City Hospital

Secretary-Treasurer
Miss Anita Slominski, O.T.R.
C. P. Clinic, Riley Hospital, Indianapolis

NORTHERN CALIFORNIA

Delegate-Reporter, Mary D. Booth, O.T.R.

Meetings: Five meetings are scheduled during the 1946-1947 year. The first meeting, a Sunday picnic at Half-Moon Bay, California, was for the purpose of greeting the many new members who have recently joined the association. The second meeting was held at the Children's Hospital in San Francisco and Dr. Lucille Eising spoke on the treatment of poliomyelitis. This was followed by a demonstration of the use of occupational therapy with these patients. At the third meeting, on January 30, 1947 at Langley-Porter Psychiatric Clinic, Dr. Bowman, Medical Superintendent of the Clinic, and Dr. Vorhees, Superintendent at Twin Pines Sanatorium, spoke to the group. A case presentation closed the meeting which was followed by a tea and craft exhibit. The program for the fourth meeting, to be held at Letterman General Hospital in San Francisco on March 28th, has not yet been announced. The Annual Meeting is scheduled for May.

Community Cooperation: The Association is represented on the California Council of Agencies for the Handicapped. Our meetings are open to members of the Physiotherapy Association and they extend us the same courtesy.

Miss Lucy Gore, O.T.R., has been giving a series of lectures on occupational therapy to the students in physical therapy at Stanford University.

Miss Arlene VanDerhoef, O.T.R., Mills College, will join in a community study entitled "Growing Old Comfortably." She will speak on occupational and recreational therapy with emphasis on sources for craft ideas and supplies, and will demonstrate "The Talking Book" and "The Projected Book."

Miss Carlotta Welles, O.T.R., Rehabilitation Center of San Francisco, is giving a course in

occupational therapy for the Visiting Nurses' Association. Both theory and crafts are presented in a course of six two-hour sessions, so that the nurses may use the material in work with the homebound.

Mrs. Louis Smith, O.T.R., Santa Clara County Tuberculosis Sanatorium, and Miss Mary Booth, O.T.R., San Jose State College, spoke on the use of occupational therapy in the treatment of tuberculosis at a joint in-service staff education program for public health nurses in San Jose. Mrs. Smith described occupational therapy for hospitalized patients and Miss Booth discussed problems of the homebound patient.

Miss Dorothy Sniffin, O.T.R., Letterman General Hospital, San Francisco, is the Program Chairman for the Spastic Children's Society of San Francisco.

This is a small parent's group formed for the purpose of promoting the welfare of all spastics of the city. The group endeavors to encourage and assist spastics in the management of their problems in schools, playgrounds, transportation, medical care and parent education. The program for the current year is as follows:

1. The Cerebral Palsies
   Divisions
   Planned treatment
2. Training Programs
   Infant and Child dressing, feeding, walking
3. Recreational Activities
4. Occupational Therapy
5. Physical Therapy
6. Psychology of Handicapped
   Training of Parents
   Training of the Public
7. Vocational Opportunities
   Goodwill, Kaiser, etc.
8. Reports on Successful Compensations
   Jeannie, others at C. P. Center
9. Bibliography
   Books and magazines
10. Surveys of work in other groups.

Officers of the N.C.O.T.A. are as follows:

President
Miss Arlene VanDerhoef, O.T.R.
Mills College, Oakland
Vice-President
Miss Gwen Wright, O.T.R., Stanford Convalescent Home, Stanford University
Secretary-Treasurer
Miss Margaret Middleton, O.T.R.
Langley-Porter Clinic, San Francisco

MICHIGAN

Delegate Reporter, Marion R. Spear, O.T.R.

The M.O.T.A. is divided into four districts, each of which has a chairman. The Detroit group is the most active because its members are not widely separated as are those in the other districts.

State Meetings: The highlight of the October meeting, which was held at the Y.W.C.A. in Detroit, was a lecture by Mr. Beaver Edwards. Mr. Edwards, a former sculptor who is well known in this part of the country for his unusual work with cosmic prostheses, illustrated his talk with interesting slides.

A state board meeting, held in Detroit in January, was attended by about 30 M.O.T.A. members. This was followed by a Checho-Slovakian dinner and a program, at the International Institute, which included musical numbers and demonstrations by various nationality groups.

District Meeting — Wayne County: A dinner meeting, which was held in March 1946, was attended by therapists, students and guests from Ypsilanti, Ann Arbor, and Northville. Dr. Thomas K. Gruber, Superintendent at Eloise Hospital, gave a cordial welcome to the group. Dr. Louis Eipschutz, Clinical Director at this hospital, gave a short talk on the importance of occupational and recreational therapy. Dr. Ira M. Altschuler, who is sponsoring music therapy here, discussed this type of therapy at length with the various visitors who were interested. An interesting case history was given by Mrs. Monica Surgit, Acting Head of the Psychiatric Social Service Department, and Mr. Albert Sadler, Medical Photographer, showed moving pictures which he had taken of occupational, recreational, and music therapy at Eloise.

Membership Survey: A very complete survey of the state has been made and now a membership drive is under way. As new therapists come to the state, they are immediately welcomed to the M.O.T.A. in the classification for which they qualify. As in other states, the demand for registered therapists is still in excess of the supply.

Homebound: During the year several new homebound programs have been started and interest in the tuberculosis field is expanding rapidly.

Civil Service: The Civil Service Commission has been approached once more relative to including the word REGISTERED before the term Occupational Therapist.

President
Mrs. Lelia M. Wilkins, O.T.R., Dir. O.T.
Pontiac State Hospital, Pontiac
Vice-President
Miss Adaline Truax, O.T.R.
Herman Keifer Hospital, Detroit
Secretary
Miss Doris Ellenbecker, O.T.R.
Ypsilanti State Hospital, Ypsilanti
Treasurer
Miss Ruth Wisdom, O.T.R.
Neuropsychiatric Institute, Ann Arbor

WESTERN PENNSYLVANIA

Delegate-Reporter, Mrs. Bessie Clark, O.T.R.

The W.P.O.T.A. was organized in 1938. As it was difficult for the members in the western part of the state to attend meetings in the eastern part, namely Philadelphia, it was considered desirable to have an organization more conveniently located. The present membership is widely scattered throughout the western part of the state.

Meetings: Three business meetings were held during 1946 at the Western State Psychiatric Institute and Clinic, Pittsburgh. Matters pertaining to the national organization, referred by the delegate, were considered and acted upon. Seventy-five per cent of the members of this organization attended the annual meeting of the A.O.T.A. in Chicago in August, 1946.

Civil Service: There has been no change in the status of the registered occupational therapists in the state hospitals. It has been the practice of the Department of Welfare of this state to employ only registered O.T.'s to fill positions designated for occupational therapists. Civil Service is not in force.

Officers of the W.P.O.T.A. are as follows:

President and Alternate Delegate
Miss Carmene Davidson, O.T.R.
Director, Occupational Therapy
Torrance State Hospital
Torrance, Pa.
Vice-President
Mrs. Harriett Canterbury, O.T.R.
Director, Occupational Therapy
Dixmont State Hospital, Dixmont
Secretary
Miss Marjorie Roth, O.T.R.
Director, Occupational Therapy
Mayview State Hospital, Mayview
Treasurer and Delegate
Mrs. Bessie Clark, O.T.R.
Director, Occupational Therapy
Aspinwall Veterans Hospital, Aspinwall

NEW JERSEY

Delegate-Reporter, Naida Ackley, O.T.R.

Meetings: A meeting was held in Atlantic City on May 4, 1946, in conjunction with the New Jersey Hospital Association Convention. The program consisted of a series of exhibits by the O.T. department of various hospitals; papers on the application of O.T. in various types of hospitals such as private mental, state mental, general hospitals, and hospitals using a program of "industrial therapy"; a series of demonstrations of craft activities by representatives of several companies. A business meeting and election of officers was also held at this time.

A meeting was held at the County Museum at Freehold on October 17, 1946. The Delegate's and Alternate's reports of the Annual Meeting of the A.O.T.A. were given and a vote was taken on the points referred to the state associations by the House of Delegates. There was also a business meeting. The remainder of the program consisted of a most stimulating illustrated lecture on treatments in an orthopedic workshop by Miss Edith Brokaw, Assistant Director of O.T. at Columbia University, and an Army film showing the rehabilitation of psychoneurotic service men with special emphasis on the use of group therapy and hypnosis in treatment. This film was shown with the cooperation of the Department of Institutions and Agencies of the State of New Jersey.

Civil Service: On October 9, 1946, two civil service examinations for occupational therapists in the State of New Jersey were held — one for staff therapists and one for senior therapists. These are the first N. J. civil service examinations for occupational therapists which have been given since the begin-

ning of the war and all appointments during this time have been on a temporary basis. When the results of the examinations are announced permanent appointment will again be possible.

Officers: In January 1947 our president, Mrs. Mary Boland, resigned, to our regret, and our First Vice President is serving as Acting President until the next election of officers in the near future.

First Vice-President
Miss Adeline W. Edmunds, O.T.R.
New Jersey State Hospital, Trenton, N. J.

Second Vice-President
Mrs. Lonnie Carpenter, O.T.R.
New Jersey State Hospital, Trenton, N. J.

Secretary
Miss Eleanor Lindley, O.T.R.
Community Hospital of the Northern Valley
Englewood, N. J.

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New Jersey State Hospital, Trenton, N. J.

REPORT OF THE SURVEY OF OCCUPATIONAL THERAPY

Conducted by the House of Delegates

OCTOBER, 1946

In the spring of 1946 a survey of occupational therapy in the U. S. A. was made. This was done by having all regional or state associations send out a questionnaire to all civilian departments in their area. Questionnaires were also sent to departments where there were no local associations and to the Army, Navy and Veterans Administration. A summary of the facts as ascertained is here given.

Inasmuch as the survey was conducted by means of a questionnaire, some discrepancies exist. Not all questionnaires were returned; it is estimated that 80% of the departments replied. The discrepancies which do exist are not sufficient to invalidate the broader conclusions drawn from the data. All numbers and figures should be, however, regarded as approximate, because of the rapid change in personnel in the federal hospitals and the increases of salary ranges in civilian hospitals to meet the rising cost of living. All figures are based on the questionnaires answered.

1. Number of U. S. Departments heard from—662.
   Civilian .....475 as of July 1, 1946
   Navy .....33 as of September 20, 1946
   Army .....39 as of August 1, 1946
   Veterans .....115 as of July 25, 1946
2. Number of registered therapists employed—1465.
   Civilian 925 Army 272
   Navy 25 Veterans 243
3. Total number of civilian O.T. Departments offering a student training program—127.
*4. Other types of personnel most frequently employed in O.T. Departments
   Stenographic Recreation
   Physical Education Music
   Librarian Education
   Aides or attendants assigned to O.T.
*5. Number of civilian Departments using volunteers—122. (Used primarily in General and Children's Hospitals). Work most usually done by volunteers.
   Preparation and finishing
   Secretarial
   Recreational
6. Number of civilian departments with physician in charge—150.
7. Number of vacancies for registered O.T.'s.
   Civilians 261
   Veterans 550
   *Navy 32
   843
   The Navy to meet its need is training nurses in occupational therapy. Thirty-six started in September at accredited schools of occupational therapy. The present vacancies in the Navy will be filled by civilian service appointment at P2 and P3 levels.
8. Expansion of Departments planned for immediate future indicate the need of 1059 therapists.
   Civilian 459
   Veterans ..... 600—by July, 1948
9. Specialties in O.T. in which present vacancies occur.

	Civilian	*Veterans*	*Total*
Psychiatric	169	244	413
General	27	271	298
Orthopedic	11	*	*
Tuberculosis	24	35	59
Children	10		10
Home Service	5		5
Mental Deficiency .	5		5
Miscellaneous	10		10
			811
Navy—specialty not known			32
			843

   *Included in above figure.
10. Specialties in O.T. in which expansion is expected in immediate future. *Civilian only.*

Psychiatric	275	Children	13
General	84	Home Service	16
Orthopedic	24	Mental Deficiency	18
Tuberculosis	23	Miscellaneous	12

WORKING HOURS, VACATIONS, SICK LEAVE, RETIREMENT AND SALARIES

There is a great variation in the salaries received by occupational therapists. In filling in the questionnaire there appears to have been some confusion as to whether the "take home pay" or total salary should have been given, also the variation in maintenance makes difficulties in determining the exact amount paid. This we hope accounts for some of the very low salaries found in isolated spots. Instances were found where the director of occupational therapy was apparently receiving less pay than attendants assigned to the department. On the other hand in the federal services the pay is excellent.

Vacations. The average length of vacation for all therapists is three weeks. Many, however, get one month; those receiving only one or two weeks, primarily in mental hospitals, lower the average.

Sick Leave. The average sick leave for all therapists is 14 days per year, though some receive as low as 3 days per year, while others have indefinite sick leave.

Hours. The average hours of work per week is 40. A number, however, work 48 hours per week, while there are also many on a 5 day week, i. e., 35 hours.

Medical Care. Complete medical care and hospitalization is offered primarily when full maintenance is given. In other cases a discount on hospital care or membership in the Blue Cross Plan is usually provided.

Retirement Plan. Provisions for retirement benefits are provided in federal and most state and city hospitals. Many other departments are covered by some provision. This in many is a new development made possible by the two plans offered by the Community Chests and the American Hospital Association.

Salaries. It is interesting to note that the fields of occupational therapy in which the largest number of vacancies lie, also offer the lowest remuneration. This is not true in all areas of the country, as in some states excellent salaries are paid. Geographical distribution or the relative wealth of the community do not account for the discrepancies.

Federal Salaries.

Army.

Army Area Consultant—P4	$4902.00
Chief Occupational Therapist, Hospital P3	4149.69
Unit head, Hospital P2	3397.20
Staff Therapist—P1	2644.80

The Veterans Hospitals give the same salary, although the Civil Service ratings are SP6, 7, 8, P3, 4.

The Navy when employing civilian O. T.'s pay P2 and P3 salaries. WAVES are paid according to rank.

Civilian Hospital. Psychiatric—Maintenance included. For a director of a department salaries range from $1000 to $3600 in state mental hospitals. Some states offer no more than $1000 per year for staff therapists. There is perhaps a greater discrepancy in remuneration offered in psychiatric work than in any other field.

Tuberculosis. Again low remuneration is characteristic, although the degree of variation is not so great. A director of a department may in most instances receive no more than $2400 with a few exceptions and many are working for far less. It is interesting to note the private tuberculosis sanatoriums offer approximately $500 less per year than state or city.

General Hospital. In the general hospital field including many so-called special hospitals, while the cash salary is greater, maintenance is generally not provided. There is, however, no question that this group receives higher remuneration than in the psychiatric and tuberculosis fields.

Workshops. The Curative Workshops and Homebound Services definitely pay the best civilian salaries, although here again great variation is shown.

Average Salaries. The average of all civilian salaries is:

Director	$2697
Assistant Director	2039
Staff Therapist	1758

The averages do not, of course, take into consideration the size of the O. T. Department or the number of beds in the hospital. Naturally, greater responsibility should have its financial reward.

The total compilation of the survey is in the office of the American Occupational Therapy Association. Material as to salary ranges in each field is available on request to ther-

apists needing this information for bonafide reasons.

Special appreciation for the work done on this survey should be expressed to the chairman of the survey committee of each state, to Miss Brownell, Miss Messick and Miss Meyers, and to Miss Minna Schulman, Miss Janet Juve, Miss Sallie Jones, Miss Lynn McCleary, Miss Elizabeth Hopkins who made the final compilation of all the salary questionnaires and of the state reports.

CLARE S. SPACKMAN, O.T.R.
Chairman, Survey Committee
House of Delegates

SPECIAL GROUPS

VETERANS

Veterans Administration Pre-convention Date. Plans are being formulated to have a one-day meeting prior to the Annual Convention in the Hotel Del Coronado for Veterans Administration occupational therapists and any others who are interested in Veterans Administration problems and progress. The meetings for the day will be composed of talks presenting and discussing the varied programs found in the Veterans hospitals. It is hoped that we will have twice the number of occupational therapists from our hospitals that we had at the Chicago meeting last year.

Advisory Committee. Dr. Walter E. Barton, Superintendent of Boston State Hospital, Chairman; Mrs. Winifred Kahmann, President of AOTA; and Miss Sue P. Hurt, Educational Secretary of AOTA, have accepted appointments as members of an advisory committee for occupational therapy in the Veterans Administration. This follows the policy of VA to secure leaders in the medical professions on consultant and advisory basis for the many departments.

Personnel Survey. The Personnel Survey, just completed, shows that we have occupational therapy departments in 120 of the 124 hospitals in the Veterans Administration. There are qualified therapists in 116 of these hospitals.

Chief Therapists in Branch Offices. Four Branch Offices now have a Chief of Occupational Therapy who are:

New York, N. Y., Miss Elizabeth Smedes
Chicago, Ill., Miss Mary McDonough
St. Louis, Mo., Miss Leonelle Gamble
Dallas, Texas, Miss Mary Britton

Professional Rating. The long-awaited reclassification specifications for occupational therapy positions have been announced. This gives professional status to qualified therapists. These new specifications for occupational therapy positions are the result of an extended survey of field positions. The most important job for each therapist now is to prove she is worthy of professional status and that the work she does is an adjunct to medicine and worthy of professional rating.

Clarification of Purpose and Objectives. Some recent discussions on the need of clarifying purpose and objectives of occupational therapy have brought out these suggestions:

Definition: Occupational Therapy is the treatment of disease or injury, either physical or mental, by the scientific use of remedial activities, such as properly selected and adapted craft.

Function: The function of occupational therapy is to provide, as prescribed by a physician, scientific, purposeful, and constructive activity that will promote—

1. Physically: restoration of muscle tone, joint motion and development of coordination;
2. Mentally: release from mental and emotional strain;
3. Socially; motivation back to normal life.

Principles: Principles governing occupational therapy are:

1. Prescriptions by a physician based on the individual needs of the patient;
2. Activity must be definitive, purposeful and constructive;
3. Equipment must be properly selected and adapted to meet the individual needs of the patient.

Jane E. Myers, O.T.R.

U. S. PUBLIC HEALTH

Editor, A. William Reggio, M.D.

The Physical Medicine and Rehabilitation Department in the Hospital Division of the U. S. Public Health Service can be visualized by the accompanying organization chart.

Liaison between occupational and physical therapy is extremely important and the chiefs of the two departments must confer periodi-

cally on any patient receiving therapy in both departments.

Out-patients are included in the "Ambulatory Patients" category as they are just as important as the in-patients for continuing therapy.

The majority of U. S. Marine Hospitals are of a general medical and surgical type and for them this program has been planned. Those hospitals caring exclusively for psychiatric or tuberculosis patients require a special program of a somewhat different nature.

Physical therapy and occupational therapy will be coordinated and a close liaison maintained with the local vocational rehabilitation agency. Vocational counsellors will be called upon to interview and test patients as the need arises. The Medical Social Service Department of the hospital will, in certain instances, be a very necessary adjunct to the successful rehabilitation of a patient. Without such service, some otherwise avoidable difficulties will present themselves which will affect the patient adversely.

If as a result of injury or illness a patient will be unable to return to his former occupation, vocational rehabilitation must be commenced at the earliest moment consistent with good medical care. In such instances the State vocational rehabilitation agency will be called upon. When a patient requires referral to such an agency, the preliminary or prevocational rehabilitation work, after conferring with the agency, can be started within the Service hospital, thus saving valuable time for the patient.

Specifically, and practically, actuation of this program will enable the Service to: (1) Initiate physical rehabilitation at the earliest moment in convalescence, thus avoiding serious deconditioning; (2) Speed recovery and reduce the period of hospitalization; and (3) Aid in the restoration of function, thus decreasing residual disability.

Purely recreational service or activity is not within the scope of the duties of the occupational therapist. These are attended to by the American Red Cross and other people giving their services to a hospital for this particular purpose. They are recreational or diversional in a sense, of course, but are for the entire hospital population and have no specific therapeutic purpose other than possibly aiding morale and avoiding boredom among the patients.

The plan is in full operation now at the Boston Marine Hospital where it commenced in June 1946 and in the occupational therapy department the patient load has already reached 51 with a treatment load of 523 for a month. This load has been carried by the chief therapist and some assistance with students assigned for clinical training from the Boston School of Occupational Therapy. Shortly a full-time assistant therapist is to be added to the staff as the patient load is increasing steadily and becoming too much for one therapist to carry.

The Marine Hospital at Baltimore is starting the program as soon as a chief therapist can be found. Similarly at the Stapleton, Staten Island Marine Hospital.

At the two tuberculosis hospitals, namely, at Neponsit, Rockaway Beach, Long Island, and at Fort Stanton, New Mexico, programs are under way and progressing very satisfactorily.

The chief difficulties of course in developing further programs are the so familiar triad of "People, Place and Pence!" That is "Qualified therapists, adequate space and funds" for doing a good job. It must be good or not at all! Halfway measures are never acceptable. The beginning may be small but it must be good.

For the present the occupational therapists will be employed under civil service in the sub-professional grade which, however, is shortly to be changed to the professional grade.

Only therapists who are graduates of an approved school will be considered for positions. The entering grade for recent graduates without additional clinical experience is at grade SP-6, commencing salary of $2644.80 and when professional status is granted will be at P-1 with the same commencing salary.

SHOP HINT

When a rapid finish is required for wooden projects which are not going to have hard usage, mix oil paint from artists colors with a regular floor wax (either paste or liquid) and apply with cloth. Allow drying before polishing.

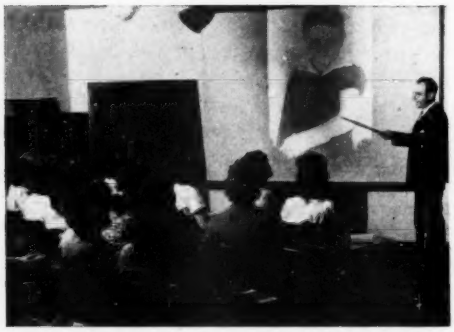
M. E. B.

SCHOOL SECTION

MILWAUKEE-DOWNER COLLEGE, DEPARTMENT OF OCCUPATIONAL THERAPY

2512 East Hartford Avenue, Milwaukee 11, Wisconsin

PROFESSOR HENRIETTA MCNARY, O.T.R., *Director*



Milwaukee-Downer College students watch, as medical lecturer illustrates position of immobilization in plaster for traumatic conditions. (Dr. Walter Blount, Orthopedic Surgeon).

Almost a century ago a small seminary in the Middle West dared to offer education on the college level to young women. As the passing years justified it, the college ventured further to introduce courses never before listed in a college catalogue.

The department of occupational therapy at Milwaukee-Downer College is an outgrowth of that pioneering spirit. It has come a long way since the first girl elected "invalid occupations" in the 1913 curriculum, and her successor made a survey of possibilities of crafts for recreation and rehabilitation of patients in hospitals. She graduated in 1915 to become "director of industrial recreations" at the new Muirdale Hospital for the tuberculous, before the term "occupational therapist" had been coined.

Early graduates had little of the scientific background of today's "OTR." They knew that the hand obeyed the brain, but today's therapist knows how and why. Today's student watches the medical lecturer demonstrate on the prosected specimen the action of ligaments, tendons, and joints, and she actually sees the muscle attachments and direction of fibers. She has a planned sequence of well integrated courses to build a sound concept for participation in each of the medical services before clinical training in hospitals. In a final six week seminar she discusses her clinical experience and reviews her academic program in preparation for a comprehensive examination. Meanwhile, she completes her thesis on some significant phase of occupational therapy in which she has combined original thinking with thorough study, having had the benefit of the hospital libraries with their rich professional facilities.

From the first, Milwaukee-Downer was fortunate in being able to offer clinical training in local institutions in which occupational therapy developed concurrently, notably the Curative Workshop. As the college grew and needed additional training centers, it kept the same close relationship which it shares with the early centers that grew up with it. A Clinical Training Council of directors meets regularly to increase correlation between the college training and the clinical. Recently Milwaukee-Downer has invited the two newer schools of occupational therapy in Wisconsin to join the Clinical Training Council and participate in the four regular yearly meetings.

Three women have been largely responsible for the development of occupational therapy at Milwaukee-Downer College. Elizabeth Green Upham, now Mrs. Carl H. Davis, was the driving force in getting it started under President Ellen C. Sabin. In her courses in applied arts she placed emphasis on their possibilities for the handicapped. With the backing of the Russell Sage Foundation, she studied the uses of "hand work" for recreation and rehabilitation of patients, and wrote bulletins on

"Ward Occupations" and "Training Teachers of Occupational Therapy for Rehabilitation of Disabled Soldiers and Sailors," before the United States had entered the first World War. And she organized and headed the department formally announced in 1918 at Milwaukee-Downer "to train those women who desire to consecrate themselves to this service for the new profession of Occupational Therapy."

Marjorie Taylor, OTR, her successor in 1929, under President Lucia R. Briggs, developed the program, working closely with the A.M.A. in getting standards set for the accrediting of O. T. schools in the United States. In 1931 Milwaukee-Downer established the five year program leading to the B.S. degree with a major in O. T. It was the first college to confer a degree for training in occupational therapy.

Henrietta McNary, OTR, director since 1939, has expanded the department to meet the new demands of the field. She conducted emergency courses for the army in 1944 and 1945, confining them to the summer months in order to safeguard standards in the heavily loaded regular department. In 1945-46 the college lent her to the AOTA for work as an educational field secretary. Today, graduates of both the regular and the emergency courses are serving in veterans' facilities, in government hospitals, and in civilian hospitals all over the country and beyond.

Occupational therapy students at Milwaukee-Downer have a liberal arts background, as well as opportunities in the college laboratories. The college is sufficiently small so that professors can know the needs of the occupational therapist, and are keenly interested in providing training in the specialized phases of their work that are of value to an O.T. The department of speech and drama aids in the recreational therapy course, teaching puppetry. Likewise, special courses in music have been developed in those techniques useful to O.T.

Students share intimately in dormitory life, a large proportion participating in dramatic productions, publications, and athletics on the fifty acre, wooded campus. Many hold office and conduct meetings with other girls not in the field of occupational therapy.

The O.T. Club at the college has established an interschool bulletin, the first issue of which appeared in February, edited by Helen Harvey, who is also student editor for the American Journal of Occupational Therapy.

Milwaukee-Downer College has enjoyed the opportunity of pioneering in the field with its constantly broadening scope, and has initiated plans for interesting further development.

THE MILLS COLLEGE DEPARTMENT OF OCCUPATIONAL THERAPY

Oakland 13, California

ARLENE J. VANDERHOEF, O.T.R., *Director*

The department of Occupational Therapy at Mills College, Oakland, is a "World War II Baby." The course was conceived by the administration at Mills during the hectic days following the attack on Pearl Harbor. By the time the Army had set up the War Emergency Training Course for Occupational Therapists, the Mills program was functioning and had been fully approved by the American Medical Association. As a result the first to receive certificates in Occupational Therapy from Mills College were participants in this Emergency Training Course. Thus those founding the course succeeded in their aim of making a real contribution to the war effort.

With the war over, the emphasis is now being placed on filling civilian needs, and the necessary haste of the emergency training has been replaced by the policy of a thorough

training in the essentials of Occupational Therapy plus the broadening influence of a liberal arts education.

At Mills the student enrolls in a regular four year college course leading to a B.A. degree. Her major is Occupational Therapy and includes courses in anatomy, physiology, medical lectures, psychology and many of the arts and crafts.

The department is ideally situated in a College of Liberal Arts that has, incorporated in its curriculum, well established schools of Art, Music and Science. These do much to enrich the course and give the Occupational Therapy student an opportunity to develop her own interests in these lines. The student also has a certain number of elective units and is encouraged to broaden her field of knowledge with courses in the humanities.

Aside from the strictly curricular activities the Mills O.T. student shares with other college students their many social and recreational activities. These may or may not contribute to her professional training but they certainly are important in the development of the well-rounded type of women so essential to this profession.

The very important Clinical Training Period does not begin until the student has been granted her A.B. Following graduation she spends nine months in various types of hospitals where she becomes familiar with the actual working of an Occupational Therapy department and the treatment of different types of patients. Upon successful completion of this training period she is granted the Mills College Certificate in Occupational Therapy and is eligible to take the registration examination given by the American Occupational Therapy Association.

College graduates may enroll in the Graduate School of Mills College and complete the certificate requirements with three or four terms of academic work plus the nine months training period.

As a Department of Occupational Therapy fully approved by the American Medical Association Mills has much to offer its students and as part of a progressive women's college offers more than professional training. Mills College is as much interested in the development of fine, well-rounded, adult women as in the establishment of careers. The course in Occupational Therapy is greatly enhanced in this setting, as this is the type of women the profession is continually seeking.

STUDENT COLUMN

Editor, Helen Harvey

Dear Student O. T.'s:

I am sure you are all interested in knowing what other members in the student field are doing. Many small bulletins and newspapers have sprung up on campuses all over the country for this purpose. It is from these publications and individual news items submitted that I hope to glean the outstanding articles which I feel will be of the greatest interest to you. Every school is doing something which should be of interest to all of us.

No student column can be complete without contributions from many schools. While all schools can not be represented in every issue, each will have its turn. There is no specification as to the type of news you submit. By receiving the news that you feel is interesting, I will have a better knowledge of what you individually would like to read. I hope you will all take a personal interest in this column and send your copy to me at Milwaukee-Downer College, Milwaukee, Wisconsin, by May 1st. Letters from you offering suggestions will be heartily welcomed.

I would like to hear from those of you in the student training program also. This column is not restricted to students on college campuses, but is open to those in the clinical field as well. Many of us are more or less bound to specific parts of the country; however, this does not limit our interest and curiosity about various institutions in which clinical training is being directed.

I hope this column will be a means of drawing all occupational therapy students closer together. No one can say when we will meet face to face.

News from Milwaukee-Downer College

Six concentrated weeks of work and play culminated in a matinee and evening performance of puppets by the students in the recreational therapy class. Each member worked on various phases of production, and constructed

two puppets, one of which was a clown. The latter was chosen because the manipulation offers variety and is not inhibiting.

Choral speaking and music were effectively combined with character speech in the story of "Sleeping Beauty" which was adapted for hand puppets. Hand puppets are suitable for entertainment in hospitals or for use by patients because the entire unit of stage and puppets is very portable.

A marionette Wishing Fairy play, complete with a giant, witch, and elephant, particularly delighted the youngsters in the audience, as did the circus parade which was made up of clowns and animals. Mother and baby animal combination brought an invigorating response which was therapeutic for both the audience and the manipulators.

News from Mount Mary College

Eight of the advanced occupational therapy students have volunteered to teach various crafts at the Milwaukee Goodwill Industries on Thursday nights from seven to nine. Classes began February 13 and will continue until May 15. Crafts being taught include fly-tying, weaving, leather work, knitting, block printing, and fabric stenciling.

Plans are being made at the present time for the Wisconsin O.T. Association meeting to be held at Mount Mary College on May 16. Following the general business meeting, there will be an exhibition and demonstration of arts and crafts by the students of the college.

ORGANIZATION AND ADMINISTRATION

Marguerite Abbott, O.T.R., Editor

Organization and Administration

The purpose of the Organization and Administration section is to present to the membership at large trends and practices in Occupational Therapy. New curricula and techniques being developed in the schools will be presented. Pertinent articles and reviews of allied books and papers as well as suggested supplemented references will be included.

As this section is to be representative of the field, articles, contributions, and questions, relative to Organization and Administration will be solicited for this section and should be sent to the divisional editor.

To introduce this section and as a working basis for future articles, the outline of the course in Organization and Administration, as given at Columbia and the Boston School of Occupational Therapy is presented.

It will be noted that this outline embraces the basic fundamentals present in all the service areas and is comprised of twenty-five units of instruction, in chronological order, which represent a common denominator of the professional field. Each unit will be amplified in future issues.

The objective of the course is to give to the student a tangible set of rules, procedures, and technical information, which will enable her to proceed intelligently, relative to the complete organization and administration of any type of Occupational Therapy Department.

Course Outline

Occupational Therapy Organization and Administration

Unit 1. Objectives and Definition Organization and Administration
Unit 2. Organization Charts
Unit 3. Principles of Administration
Unit 4. Overview of Different Types Hospitals
Unit 5. Function of Hospital Boards
Unit 6. Key Personnel
Unit 7. Interdepartmental Relationships
Unit 8. Initial Planning Phase of an O. T. Dept.
Unit 9. Variant Basic Divisions of Departments
Unit 10. Variant Basic Non-Expendables
Unit 11. Variant Expendables
Unit 12. Floor Plans
Unit 13. Supply Requisitioning
Unit 14. Inventories
Unit 15. Finances
Unit 16. Records
Unit 17. Shop-Ward Supervision
Unit 18. Student Clinical Training Program
Unit 19. Professional Ethics
Unit 20. Community Resources
Unit 21. Volunteers
Unit 22. Methods of Counseling
Unit 23. Application for Positions
Unit 24. Bibliography
Unit 25. Summary. Over-all Administration of a Department
Unit 26. Student Evaluation Methods

ACCREDITED SCHOOLS OF OCCUPATIONAL THERAPY

and those with Accreditation Pending

School (and Department)	*Address of School*	*Director*
Boston School of Occupational Therapy Affiliated with Tufts University	7 Harcourt Street Boston 16, Mass.	Mrs. John A. Greene, Director
Columbia University College of Physicians & Surgeons	630 West 168th Street New York 32, N. Y.	Miss Marjorie Fish, O.T.R., Director of Training Courses in O.T.
*Iowa, State University of College of Medicine	Div. of Physical Medicine Iowa City, Iowa	Miss Marguerite McDonald, O.T.R., Occupational Therapy Supervisor
Illinois, University of College of Medicine	1853 West Polk Street Chicago 12, Ill.	Miss Beatrice D. Wade, O.T.R., Director, Department of O.T.
Kalamazoo School of Occupational Therapy of Western Michigan College of Education	Kalamazoo 45, Mich.	Miss Marion R. Spear, O.T.R., Director of O.T.
Kansas, University of	School of O.T. Lawrence, Kan.	Miss Nancie B. Greenman, O.T.R. Director of O.T.
Michigan State Normal College	Ypsilanti, Mich.	Miss Gladys Tmey, O.T.R., Supervising Director of O.T.
Mills College	Oakland 13, Calif.	Miss Arlene J. VanDerhoef, O.T.R., Director of O.T.
Milwaukee-Downer College	2512 East Hartford Ave. Milwaukee, Wis.	Prof. Henrietta McNary, B.S., O.T.R., Director of O.T.
*Minnesota, University of School of Medicine	Minneapolis, Minn.	Miss Borghild Hanson, O.T.R., Director of O.T.
Mount Mary College	Milwaukee 13, Wis.	Sister Mary Arthur, O.T.R., Associate Professor, Director of O.T.
New Hampshire, University of College of Liberal Arts	Durham, N. H.	Miss Doris F. Wilkins, O.T.R., Supervisor of O.T. Curriculum
New York University School of Education	Washington Square New York 3, N. Y.	Miss Frieda J. Behlen, O.T.R., M.A., Director of O.T. Curriculum
Ohio State University College of Education	105 Arps Hall Columbus 10, Ohio	Miss Martha E. Jackson, O.T.R., Associate Professor, Chairman, O.T. Department
Philadelphia School of Occupational Therapy Affiliated with University of Pennsylvania— School of Education	419 South 19th Street Philadelphia 46, Pa.	Miss Helen S. Willard, O.T.R., Director
*Puget Sound, College of	N. 15th and Warner St. Tacoma 6, Wash.	Miss Edna-Ellen Bell, O.T.R., Director of O.T. and Rehabilitation
*Saint Catherine, College of	St. Paul 1, Minn.	Sister Jeanne Marie, O.T.R., Director of O.T.
San Jose State College	San Jose 14, Calif.	Miss Mary Booth, O.T.R., Asst. Prof. in O.T.
Southern California, University of College of Letters, Arts and Sciences	Box 274 Los Angeles 7, Calif.	Miss Margaret S. Rood, O.T.R., Head, Department of O.T.
*Texas State College for Women Department of Art	Denton, Texas	Mrs. Fanny B. Vanderkooi, O.T.R., Associate Professor, Supervisor of O.T.
Toronto, University of Department of University Extension	Toronto, Canada	Miss Helen D. LeVescente, O.T.R., Supervisor, Course in O.T.

Washington University School of Medicine	4567 Scott Avenue St. Louis 10, Mo.	Miss Dorothy L. Flint, O.T.R., Acting Director, Department of O.T.
*Wayne University College of Liberal Arts and College of Education	Detroit 1, Mich.	Miss Barnara Jewett, O.T.R., Asst. Professor, Director of O.T.
William and Mary, College of Richmond Professional Institute	901 W. Franklin Street Richmond 20, Va.	Miss Helen Freas, O.T.R., Asst. Professor, Acting Director of O.T. Training
*Wisconsin, University of School of Medicine	1300 University Avenue Madison 6, Wis.	Miss Caroline Goss Thompson, O.T.R., Asst. Professor, Director of O.T.

*Schools with Accreditation Pending.

SPECIAL NOTICES

YOUR JOURNAL AND MEMBERSHIP DUES

We are sorry that some members will not receive the first issue of A-JOT. The national office sends us for our mailing lists, the name of those whose dues are paid, and notices of changes of address.

Anyone may subscribe to A-JOT ($5.00 per volume or $1.00 per single copy, A-JOT Publishing Office, 739 Boylston Street, Suite 129, Boston 16) but members of A.O.T.A. receive the Journal as a service of the Association by the payment of dues. Initial registration ($10.00) and re-registration ($3.00 a year) are fees which are distinct from dues, and do not include subscription to A-JOT.

All dues for the year are payable as of January 1st of each year. If sustaining membership dues of $10.00, active or associate subscriber membership dues of $6.00, or student membership dues of $4.00 a year have been paid, and if the Journal has not been received, please write to Editor, *American Journal of Occupational Therapy*, 64 Commonwealth Avenue, Boston 16.

SPECIAL NOTICE TO DIRECTORS OF CLINICAL TRAINING

It has been customary for most school directors to send with the student who goes to a clinical training center, a blank form which describes to the O.T. director of the center, the student's health, experience, and educational background. It has been suggested that more constructive help and understanding supervision could be given the student if the forms could contain even more complete information about the student. It should be recognized that this proposition should have careful consideration since it might involve increases in clerical work in the school offices which are already understaffed in many instances. Your comments and suggestions are urgently invited. Please send them to Carlotta Welles, 204 East Mendocino Street, Altadena, California.

Announcing the

HANDBOOK OF OCCUPATIONAL THERAPY

Compiled by the House of Delegates and the Education Office of the A.O.T.A. the HANDBOOK brings you information on:

The American Occupational Therapy Association; its origin, development, present program, working organization and personnel.

The field of Occupational Therapy Education; the minimum essentials for training, the accredited schools and the centers used for clinical training.

State and Regional Association; personnel and suggested plans for organization of associations.

An orientation to Rehabilitation; federal legislation re rehabilitation, a rehabilitation program as outlined by one state and a list of agencies concerned in rehabilitation with publications noted.

Last but not least an appendix containing an extensive list of books and publications of interest to occupational therapists classified as to subject matter, a list of publishing houses and suggested sources of educational films.

Part of the material given in the HANDBOOK is of permanent value, part pertains to current status and is temporary. Replacements for the temporary sections will be available yearly so that the HANDBOOK may be an accurate source of current information.

The HANDBOOK may be obtained now from the American Occupational Therapy Association. Price—$1.00.

WANTED — O.T. MOVIES AND SLIDES

Elsewhere in this issue may be found a listing of movies and slides from the A.O.T.A. office. If you have seen any of them, and wish to help in keeping the list up-to-date, will you let us know which you think are good, and which ones you consider out of date.

We are also requesting suggestions concerning other GOOD, educational or instructive movies or slides, pertaining directly or indirectly to O.T., which have not been listed. If the returns to the Editorial office warrant a revision of the list, the results will be printed in A-JOT. The following form may be used to facilitate replies:

MOVIES

Title .....

Producer .....

Where obtained .....

.....

Running time.....Colored or other.....

MM .....Rental fee.....

Sound or silent.....Purchase cost.....

Brief description (movie emphasizes psychiatry, physical injury, surgery, etc.).....

.....

.....

.....

SLIDES

Type subject matter.....

Producer .....

Where obtained.....

.....

Size .....Rental fee.....

Colored or other.....Purchase cost.....

Number available.....Give brief description below

.....

.....

.....

CONVENTION

Plans for the 1947 annual convention of the American Occupational Therapy Association, to be held at the luxurious Hotel del Coronado located across the bay from San Diego, Calif., are rapidly nearing completion.

All occupational therapists interested in education and play are already making plans to attend the meetings which will be held from October 31 to November 7. During those eight days, conventioneers will have full use of the elegant meeting rooms and banquet halls of the del Coronado, their recreation facilities including golf course, horseback riding, swimming at the pool or in the ocean, tennis, sailing and dancing.

On the pre-convention program dates November 1-2, there will be meetings of the Board of Delegates, Schools and Curriculum, Clinical Training and other groups. During the convention program which starts November 3 practically every field in occupational therapy will be covered with addresses and round tables conducted by eminent Doctors and leading therapists.

Special features of the convention will be a tour of the bay and possibly a visit to a ship of war. The aged missions, historic parks, the ever blooming flowers are close by, and romantic charming old Mexico is just 20 minutes away.

Average mean temperature at the Hotel during the fall months is 60 degrees so play togs and suite will be the order of the day, says the committee. In planning the return trip, the Californians charged with planning the convention hope that you stop over in much publicized Los Angeles for a tour of the hospitals and the school of occupational therapy at University of Southern California.

CONTRIBUTIONS TO A-JOT

Manuscripts for articles and special divisions should be typewritten double-spaced. Footnotes and bibliographies should be presented in this order: name of author, article title, name of periodical with volume, page, and month. Drawings should be clear, distinct, finished, and done in black on white. Photographs should be clear and distinct. Above should be sent to Editor, *American Journal of Occupational Therapy*, Garden Suite, 64 Commonwealth Avenue, Boston 16.

EVENTS CALENDAR

JUNE 9-13, 1947

American Medical Association, Atlantic City, N. J. 100th Anniversary.

JUNE 17-20, 1947

National Tuberculosis Association, San Francisco.

JUNE 25-28, 1947

The Puppet Guild of St. Louis will be hosts to the Puppeteers of America on the above dates. Occupational therapists have been invited to meet with them for their craftshop sessions.

JULY 6-12, 1947

American Physiotherapy Association, Annual Conference, Asilomar, Pacific Grove, California.

SEPTEMBER 2-6, 1947

American Congress of Physical Medicine, 25th Annual Session, Hotel Radisson, Minneapolis.

SEPTEMBER 7-12, 1947

American Association of Medical Record Librarians, Hotel Commodore, New York City.

NOVEMBER 2-7, 1947

American Occupational Therapy Association, Annual Convention, Hotel Del Coronado, Coronado, California.

O.T. CLINIC AND CASE STUDIES

Patient committees are used in the Occupational Therapy Program at the Menninger Sanitarium with results that seem to warrant their continuance. The purpose of the committees is to give the patients an opportunity to assume some responsibility for the activity program and to give them a voice in affairs which are of primary concern to them. The original patient committee is called the G.P. Committee (Gripes and Program Committee) and was organized to help neutralize, consider and discuss complaints and to channel these complaints to the proper departments. The members of this committee are representative of the whole patient group and are able to view a complaint objectively, and thus determine which complaints should be considered at all. Also this committee promotes other committees to plan definite activities in the occupational therapy department. The two such present committees are called C.O.M.A. (Committee for Monday Night Activities) and the Roundabout Committee.

The purpose of C.O.M.A. is the planning of the regularly scheduled Monday night recreational activity. This activity may be a party, picnic, dance, dinner-dance, etc.

The Roundabout Committee takes the responsibility for the bi-monthly patient newspaper—*The Roundabout.* The committee makes the general plan of the paper, makes assignments to other patients, collects material, does the typing and cutting of stencils, assembles the paper after it has been mimeographed and distributes the copies.

There is supervision in each of the committees. In the G.P. Committee a member of the medical staff attends the meetings and acts as counsellor. A therapist meets with C.O.M.A. and Roundabout Committees. Each committee meets once a week. New members join upon the invitation of the committee members and with the approval of their doctors. The chairmen of C.O.M.A. and of the Roundabout Committees are members of the G.P. Committee.

Myrl Anderson, O.T.R.

HAND PLASTIC CASES

The hand plastic case as prescribed by a physician to an O. T. shop presents activating results. The therapist has to isolate the injured joints and stress localization of treatment to the injured part. The adaptation of equipment to the craft has to be carefully chosen to give maximum active exercise to the injured part.

The therapist examines the range of motion of all movements in the hand and wrist although one joint in the hand might be affected. The wrist is placed in a hyper-extended position for all finger flexion measurements. When the distal and middle joints are measured the proximal joint is placed in an extended position. Therefore, the joints not being measured are placed in a position of extension to get maximum pull of the tendons over the joint being measured for flexion.

The aim of treatment in most of the cases seen were for active flexion exercises. In treating a hand plastic case the primary importance is to adapt the craft equipment to the injured joint of the hand before considering active exercise for the entire hand and arm. We have adapted D. Bunnell's* suggestive flat block of wood ½" thickness, 2½" x 3¼" for active localized finger exercise in cord knotting. This is done by wrapping the ends of the cord around the blocks and fingers and pulling in inward rotation for active flexion exercise. Various hand blocks are adapted to the Beater of the floor loom to give the required exercise to injured joints or muscles.

Active assistive extension exercises to the injured joint of a phalanx is obtained by pulling down the levers of a table loom just below the joint which is injured.

Stress has to be made by the therapist to the patient of the purpose of the localized exercise and general exercise to the injured and uninjured parts of the hand and arm.

* "*Surgery of the Hand*" by Dr. S. Bunnell—Page 342.

Clara Levine, OTR

The Trenton State Hospital Occupational Therapy Department has just passed its six-year mark in student training with a total of 125 students. If we can draw one conclusion from the results of our training experiences it is that the more we have accepted each student on the basis of her professional training, giving her responsibility commensurate with it, the greater contribution she has made to us; the more we have made her feel an integral part of the department the better adjustment she has made to the hospital and to her training. In short, we have had fewest problems and greatest success in direct proportion to the degree in which our training program has been a preparation for therapist status rather than a continuation of student status.

One of the problems that has arisen in our student training program has been the supplementary lectures which the O. T. students receive from the medical staff. As long as the O. T. students were the only student group receiving lectures there was no difficulty. However, when a large student nursing training program was introduced, an effort was made to coordinate the lectures for both groups and this did not work out well for the O. T. students. A feasible solution has been found in giving the O. T. students clinical demonstrations and opportunity to attend medical staff meetings rather than formal lectures. We should be interested to know if other training centers have had this problem and how they have solved it.

As an O. T. department in a state psychiatric hospital we have a unit of patients who have tuberculosis in addition to their mental illness. We should be interested in an exchange of ideas about suitable projects for these patients with other departments who have similar groups.

Naida Ackley, O.T.R.
Director Occupational Therapy
Trenton State Hospital

OCCUPATIONAL THERAPY ON THE JOB

When is an individual totally rehabilitated? Is it when he gets a job and takes home a pay check, self-supporting?

The installation of an occupational therapy department at Goodwill Industries in Washington, D. C. has proven that rehabilitation of handicapped people does not necessarily stop with the first punch of the time clock.

Goodwill is an industry which collects discarded items; anything from lamps and scooters to winter overcoats and riding boots. In twenty-two repair shops, one hundred and nineteen handicapped employees put these items into salable condition, and four Goodwill stores serve as outlets.

Occupational therapy is only a few months old here, but it is no longer in an experimental stage. Already certain employees have been so noticeably helped that two or three hours a week off the production line is now being recommended, rather than merely tolerated.

As it has been set up, the occupational therapist's job at Goodwill has many facets. In the Washington plant she is the person who best understands each handicap and she, therefore, performs in an advisory capacity, trying at all times to educate foreman and fellow-workers as to what they can expect in themselves and each other. She works closely with the production manager and sits on the personnel panel which decides most of the

problems involving individuals. She has made a special job analysis of each operation in the plant and because of her knowledge of handicaps and jobs, she is consulted on all placements and transfers.

When a new, untrained person is considered for employment he is assigned to the therapist for as long as is necessary to determine just which job he is likely to do best. We call this, along with the psychological testing done by the personnel director, the Exploratory Period. We have found that giving these handicapped persons certain "jobs," similar to those carried on in the plant, yet away from the pressure of production, has cut down the number of misplacements and experiences of failure. This is also somewhat of a laboratory situation. The prospective employee can be casually observed by the staff and, at the same time, he becomes somewhat familiar with the things he may be in contact with later on.

The therapist deals with individual employees with the following goals in mind:

1. Giving the employee O. T. treatment in the "clinic" when advisable.

2. Educating the employee to the possibilities for improvement.

3. Creating within the employee the desire and incentive to do everything possible; in the clinic, on the job, and at home, which will make for the best possible adjustment. This is often a slow process, for all the employees are adults, and many of them have been handicapped most of their lives.

4. Teaching the employee to be on the lookout for those aspects of his handicap which create the greatest difficulties, and helping him to overcome them.

5. Introducing the employee to the facilities within the community which aim at helping his particular handicap. This includes such things as free lip-reading classes for hard-of-hearing, Braille library for the blind, etc.

6. Making recommendations to the social worker for medical check-ups, prosthesis, medication, and psychiatric examination.

When the therapist decides that an employee can reach a greater degree of health, efficiency, and adjustment through curative work in the clinic, she schedules him for treatments. These treatments last no longer than one hour a day, for any longer would leave a department short-handed to the point of interfering with production, and ultimately the income of the industry. She must make every minute count, planning the hour carefully so as to give the individual not only specific treatment, but also to give him suggestions for remedial work away from the clinic. The individuals who have profited the most are those who "do their homework."

As usual, the occupational therapist must be flexible and compromising. In industry, production comes first and must go on. Therefore, when the therapist is working with an employee regularly, she must accept the fact that he will not appear for treatment when the load in his department is unusually heavy.

Treatment is very definitely on a voluntary basis. The employee is paid through a social service fund for time spent in the clinic, so that he has everything to gain.

Eddie works in the upholstery department. He is a dwarf with four deformed extremities. Pronounced limitation of his left shoulder makes reaching the high places of a chair he is working on very difficult. He comes to occupational therapy three times a week for an hour. Now he can hammer tacks any place on a chair without using a stool.

A year ago Ralph was given two new legs by the Office of Vocational Rehabilitation. He works in the electrical repair shop, mending lamps, toasters, etc. He has spent an hour a day in occupational therapy for only four months, but now he walks on his legs. Previously, he just hopped through his crutches. He has learned to use his legs, but learning a trade and earning a living have continued, too.

Nancy Cole, O.T.R.
Goodwill Industries, Wash., D. C.

Indiana University Medical Center Occupational Therapy Department has been training occupational therapy students since 1926. The total trained to date is 285, and students have come from 11 different schools.

Elizabeth Gallagher, O.T.R.

Miss Marion R. Spear is the only founder of one of the five original schools who is still director of the same school. She is the director of the Kalamazoo School of Occupational Therapy of Western Michigan College of Education.

A. Marr

Do You Know That . . . .

Under the State-Federal program of vocational rehabilitation for civilians, according to a statement of Michael J. Shortley, the following services are available to render disabled men and women fit for jobs or more advantageously employable:

Medical examinations and scientific tests to determine an appropriate vocational rehabilitation plan for each applicant: counseling to help choose the correct occupation for each client by comparing his abilities with job requirements and opportunities for work in the community; medical, surgical and psychiatric treatment, including hearing aids and other artificial devices as well as authoritative advice on their use; physical and occupational therapy as a part of treatment when needed; training to develop new skills where physical impairments incapacitate individuals for their normal occupations, or where skills become obsolete through changing industrial needs; lip reading, speech correction and voice improvement training for the deaf when desirable; maintenance and transportation during rehabilitation, when needed; necessary training supplies, and occupational tools, equipment and licenses; placement on jobs to make best use of individual skills and abilities in accordance with individual conditions and temperaments, and with due regard to safeguarding against further injuries; and post-placement followup to make whatever vocational adjustments may be necessary.

The Office of Vocational Rehabilitation, which has a staff member concerned solely with the phase of the program dealing with hearing deficiencies, recently issued an information pamphlet entitled, "Opportunities for the Deaf and the Hard of Hearing."

ANNUAL MEETING OF NCR

The annual meeting of the National Council on Rehabilitation, April 29 and 30, was planned in cooperation with the National Rehabilitation Association, whose annual meeting followed immediately, on May 1, 2, and 3, at the Jefferson Hotel, St. Louis.

The Council offered papers on the rehabilitation of non-deforming diseases, such as tuberculosis, heart disease, and mental disease. The Association covered the blind, deaf, cerebral palsied, and epileptic. The Council discussed the evaluation of physical and mental disabilities while the Association outlined specific tools used in the rehabilitation process: counseling, tests and measurements, consideration of personality factors, and selective placement, with an explanation of the importance of matching physical capacities appraisal with physical demands analysis. After the Council's program on the preparation of the disabled for living, which included physical — medical and surgical — restoration, psychological restoration, and training and placement, the Association gave a detailed picture, of such facilities as homebound workshops, rehabilitation centers, and instructional programs.

MEANING OF "O.T.R."

O.T.R. after a name signifies that the user is a member of a medical team, and in keeping with medical ethics, does not advertise her services. As a member of A.O.T.A., through which she is entitled to use the insignia, she will not practice her profession except under medical prescription or supervision. To fail in this is detrimental to the profession which she has chosen to serve, and either procedure should be grounds for action by both state and national associations to which she claims membership.

SEPTEMBER PROCEDURES

Schools and Clinical Training Centers: A very successful series of conferences is being held regularly between the University of New Hampshire O.T. Staff and members of New England O.T. Departments in affiliating hospitals and centers. All day meetings are held trimonthly, visiting a different hospital or center on each occasion thereby giving the group an opportunity to see other programs as well as to hear about them. Topics center around student training which obviously allows for considerable latitude including discussions such as: Student Clinical Training Evaluation Papers; Application of A.O.T.A. Guide for Directors; Bibliographies on the various O.T. Fields; Registration Examinations. Hospitals, being less informed on the latter than the O.T. schools, are interested in this mode of retaining our professional standards. Clinical Training plays such an important part in the practical aspect of O.T. that the constant collaboration between the School and the Clinical Training Centers seems highly important. The feeling seems to be unanimous that one day every three months spent in professional discussions and exchanges of ideas is both stimulating and worth while.

DORIS F. WILKINS, O.T.R.

ARTIFICIAL LIMBS

By CAROL TIEGS

To determine what satisfactory artificial hands must be able to do, both in the matter of motions and of forces exerted, a group of scientists at UCLA are making an exhaustive experimental study of this subject.

Their laboratory is one of 15 working under the direction of the Committee on Artificial Limbs, National Research Council, to develop better artificial arms and legs than the antiquated, uncomfortable, almost useless limbs now worn by amputees.

Both the basic research, like that being done at UCLA, and the building of experimental models, which is going on in several other Southern California and eastern laboratories, is sponsored with funds contributed jointly by the Office of the Surgeon General and the Veterans' Administration.

The UCLA study of necessary arm and hand motions is being done with motion pictures.

Then, as the camera rolls, the subject performs a series of typical, everyday actions which are recorded for further study on motion picture film.

Scientists working on this project, who take turns with graduate students in serving as subjects, include Adrian D. Keller, lecturer in engineering; Dr. Craig Taylor, assistant professor of engineering; Victor Zahm, time and motion analyst, and Comdr. August Dvorak, project supervisor for the Committee on Artificial Limbs. Commander Dvorak was borrowed from the Navy by the War Department because of his qualifications for this particular kind of work.

Some 13,000 feet of film have been taken since the motion picture project started last November.

The study of forces which must be exerted by artificial hands and arms to make them practical is being undertaken by the use of strain gauges, which are in effect little gadgets that accurately measure the force exerted in an actual motion.

Similar, but more specialized, is a device worked out by Dr. Taylor for testing doorknobs, one of the bugaboos of amputees. A lever is clamped onto the doorknob to be tested, a spring scale hung over the lever, and this is pulled until the doorknob turns enough to release the catch. The reading on the scale shows how much force was used to open the door.

The entire project, as part of the UCLA program of scientific research in engineering, is under the guidance of Dean L. M. K. Boelter of the School of Engineering, and Profs. Earl Moren and John Hazen, UCLA directors of research.

Most occupational therapists are aware of the work of The Eye Bank For Sight Restoration, but less well-known are the following stipulations included in its Certification of Corporation, and recorded in the June 1946 issue of *The American Journal of Ophthalmology:*

"To carry on, directly or indirectly, such research, experimentation, etc., as may be reasonably calculated to be of value in saving, restoring, aiding or preserving eyesight or in helping to prevent or avoid blindness or impairment of vision of any sort or to ameliorate the condition of the blind or those with defective eyesight; to maintain laboratories, clearing houses of information and the like for this purpose. . . . To aid, freely and voluntarily, in any manner which may be permitted by law, by loan, guaranty, grant, scholarship, fellowship, subsidy or otherwise, any corporation or association or any surgeon, physician, scientist or student engaged in saving, restoring, aiding, helping to prevent or avoid blindness, or in whose work or welfare the corporation may have any other lawful interest. . . ."

PLANS STUDY OF CEREBRAL PALSY

Establishment of The Joint Committee for Research in the Problems of Cerebral Palsy has been announced by its chairman, Dr. Philip D. Wilson, surgeon-in-chief of the Hospital for Special Surgery.

The committee was formed, he said, to spur medical research and to correlate and intensify the development of diagnostic and treatment procedure for this little-understood condition.

The committee has begun a study of the best way to organize, finance and operate clinics for cerebral palsy patients. The urgency of the program was indicated by a recent estimate that there may be as many as 10,000 cases in New York City alone.

—Excerpt from N. Y. Times

FILMS AND SLIDES

The following pages contain the list of films and slides which has been made up by the A.O.T.A. through the suggestions and recommendations of the membership. Elsewhere in this issue will be found a form which we invite you to fill out and return to the EDITORIAL OFFICE so that the list may be kept up to date.

FILMS AND SLIDES

Occupational Therapy

1. *"Occupational Therapy."* 16 mm. 5 minutes. Charles I. Lowman, M.D., 2417 South Hope Street, Los Angeles, California.
2. *"Children's Therapeutic Division."*
   A. *Industrial Accident*—Treatment in O.T.
   B. *Curative Workshop*
   Miss Clare S. Spackman
   419 South 19th Street
   Philadelphia, Pennsylvania
   $2.50 each. 400 feet. 16 mm.
3. a. "Physical Therapy and Occupational Therapy. Correlation of Treatment with two Industrial Accident Adults."
   b. "Teaching Film Demonstrating O.T. Theory with Orthopedic Conditions."
   Full rental fee is $5.00 adjustments are made. 400-500 feet. 16 mm.
   Miss Marjorie Taylor, Curative Workshop
   660 North 18th Street
   Milwaukee, Wisconsin
4. *"General O.T."* 16 mm.
   "Arthritis." 16 mm.
   Miss Gladys Pattee, Director of O.T.
   Little Green House, Rochester, Minnesota
5. *"Hand Injury."* 400 feet. $2.00. Black and *"Posture."* white. 16 mm.
   Miss Lucy Morse, Director of O.T.
   Massachusetts General Hospital
   Boston, Massachusetts
6. *"P.T. and O.T. in Physical Rehabilitation."* 16 mm. Colored. 300 feet. Pre-Sister Kenny.
7. *"O.T. with Children and Adults."* 20 slides 2"x2". Colored.
   "Treatment of Burns." 2"x2". Colored slides.
   6. and 7. Mrs. W. C. Kahmann, Indiana U. Medical Center, Riley Hospital, Indianapolis, Indiana
8. *"Occupational Therapy."* Occupations which may be prescribed by physicians for mental and physical activities. 300 feet. 12 minutes. Transportation.
   American Medical Association
   Council on Physical Therapy
   535 North Dearborn Street
   Chicago 10, Illinois

Orthopedic Films

Bibliography of Films

1. "Directory of films on crippled children and related subjects." 1943. National Society for Crippled Children. Elyria, Ohio. Bulletin No. 36.
   Much has been taken directly from this bibliography and there is much that is not included in the following lists. Through the courtesy of the National Society for Crippled Children we have been allowed to use this material.

General

1. *"Services to the Crippled Child."* 1940. All types of cases and treatment in this outpatient clinic. 650 feet. 285 minutes. Color. Transportation and insurance. Adelaide Tichenor, Orthopedic Clinic, 1660 Termino Street, Long Beach, California.
2. *"Citadel of Hope."* 1942. Care and treatment of crippled children at Orthopedic Hospital, 2400 South Flower Street, Los Angeles, California. 800 feet. 30 minutes. Sound, color, transportation and insurance. Loaned only in California.
3. *"Give Them A Chance."* 1929. Complete program through vocational placement. 500 feet. 17 minutes. Transportation and insurance. Maryland League for Crippled Children, 827 St. Paul Street, Baltimore, Maryland.
4. *"Redesigned for Living."* Following one child through hospital back to normal life. 400 feet. 20 minutes. 1937. Loan copy available from National Society for Crippled Children, Elyria, Ohio. This is from New Jersey Orthopedic Hospital and Dispensary. 179-81 Lincoln Avenue, Orange, New Jersey.
5. *"Crippled Children in Missouri."* Missouri resources, hospital, convalescent and field service under state crippled children's services. Missouri Society for Crippled Children, 502 North Grand Boulevard, St. Louis, Missouri.
6. *"A Treatment Program for Handicapped Children."* 1940. 450 feet. 20-25 minutes. Color or black and white. Rental fee variable. Transportation and insurance. Curative Workshop. 860 North 18th Street, Milwaukee, Wisconsin.
7. *"Orthopedics."* Especially good of lower extremities. Children's Bureau, J. D. Richardson, Washington, D. C. Professional.

Infantile Paralysis

Only one film with Sister Kenny training and that is not available for showing.

1. *"Poliomyelitis."* 1938. (pre-Sister Kenny). 750 feet, two reels. 30 minutes. Orthopedic Hospital, 2400 South Flower Street, Los Angeles, California.
2. *"Poliomyelitis."* 1936. (pre-Sister Kenny). 5 reels. 2000 feet. 1 hour and 15 minutes. Transportation both ways. Children's Bureau, U. S. Department of Labor, Washington, D. C.
3. *"Mechanical Aids for Severely Handicapped Poliomyelitis Patients."* 1940. 2 reels. 500 feet each. 30-40 minutes. Transportation and insurance. Georgia Warm Springs Foundation, Warm Springs, Georgia.
4. *"Rehabilitations in Infantile Paralysis."* 1941. Physical and Occupational Therapy (pre-Sister Kenny). 750 feet. 45 minutes. Colored. Transportation and insurance.

Posture

1. *"The Feet."* 1931. Structure of Arches, Mechanical Rise of Foot.
2. *"Posture."*

1. and 2. 400 feet. 15 minutes. Transportation. Children's Bureau, U. S. Department of Labor, Washington, D. C.

3. *"Posture in Occupational Therapy."* 1942. 100 feet. 10 minutes. $5.00 rental plus transportation and insurance. Massachusetts General Hospital, Lucy Morse, Director of O.T., Boston, Massachusetts.
4. *"Posture."* 1931. One reel. 20 minutes. U. S. Children's Bureau, Washington, D. C., or Joint Orthopedic Nursing Advisory Service, 1790 Broadway, New York City.

Cerebral Palsy Films

1. *"Cottage School."* 8 mm. Color. 15 minutes. Loaned only in California. On activities of classroom and physical training in special school for cerebral palsied.
2. *"Cottage School."* For professional showing. 30 minutes. Loaned only in California. On physical training in school for cerebral palsied.

1. and 2. are from Cottage School for Spastic Children, 5105 Dover Street, Oakland, California.

3. *"Variations in Under-Water Technic."* 1927. Pool treatment of poliomyelitis and cerebral palsy patients by physiotherapists. 500 feet. 25 minutes. $10 rental fee. Transportation both ways and insurance during transit. Loaned only in California. Orthopedic Hospital, 2400 South Flower Street.
4. *"Spastic Paralysis—Surgical Treatment."* 1936. 800 feet. Borrowers pay transportation both ways and insurance. Daniel H. Bevinthal, M.D., 104 South Michigan Avenue, Chicago, Illinois.
5. *"Types of Cerebral Palsy."* Curative Workshop, 860 North 18th Street, Milwaukee, Wisconsin. 16 mm.
6. *"Types of Cerebral Palsy."* 300 feet. 16 mm. Color.
7. *"Cerebral Palsy Project."* 500 feet. Black and white. 16 mm. Correlation of P.T., O.T., S.T.
8. *"Writing, Training for Cerebral Palsy Patients."* 16 mm. 400 feet. Color and black and white. Writing as a modality of treatment with distinct training for athetoid, spastic, ataxic.
9. *"Occupational Therapy for Cerebral Palsy Patients."* 300 feet. Black and white. 16 mm.

6, 7, 8, 9. Cerebral Palsy Clinic, James W. Riley, Hospital, Indiana University Medical Center, Indianapolis, Indiana.

10. *"Genetic Development of Children with Cerebral Birth Lesions."* 1934. 450 feet. 18 mm.
11. *"Mental Deficiency Due to Birth Injuries—Spastic and Athetoid Types."* 1934. 400 feet. Contrasts spastic and athetoid types of mental deficiency and motor handicaps resulting from intracranial birth lesions.
12. *"Physical Handicaps Associated with Intracranial Birth Lesions."* 1934. 400 feet. 18 minutes. Differentiation of types and some results of treatment.

10, 11, 12. The Training School, Research Department, Vineland, New Jersey. $5.00 rental fee plus $2.00 per day after first two days. Return transportation. For professional showing only.

13. *"Curare in Spastic Paralysis."* 1 reel. 20 minutes. Michael S. Burman, M.D., 114 East 54th Street. Transportation both ways and insurance.
14. *"A Day with a Spastic Child."* 1935. 400 feet. 15 minutes. Color. Loaned only on special request. Transportation and insurance. Newark State School for Mental Defectives, Newark, New York.
15. *"Cerebral Palsy."* Color slides 2"x2". Psychology, physical, occupational and speech therapy. Cerebral Palsy Clinic, Riley Hospital, Indianapolis, Indiana.

Schools and Camps

1. *"Orthopedic Room at Haven School."* 1939. 300 feet. 15 minutes. Color. Transportation. North Shore Association for the Crippled, 800 Davis Street, Evanston, Illinois.
2. *"Camp Millhouse."* 1941. 200 feet. 20 minutes. Color. Transportation. Children's Dispensary and Hospital Association, 1045 West Washington Avenue, South Bend, Indiana.
3. *"Camp Greentop."* 1939. 500 feet. 17 minutes. Color. $5.00 rental fee plus transportation and insurance. Maryland League for Crippled Children, Inc., 827 St. Paul Street, Baltimore, Maryland.
4. *"Education of Handicapped Children in Maryland."* 1942. 700 feet. 25 minutes. Transportation. Vocational Rehabilitation Service. Maryland State Department of Education. 1112 Lexington Building, Baltimore, Maryland.

Vocational Training

1. *"Vocational Training for the Handicapped."* 1940. 700-800 feet. 15-18 minutes. Sound. Color. Transportation both ways and insurance. On counseling training and placing physically handicapped persons. California State Bureau of Vocational Rehabilitation, Library and Court Building.
2. *"School of Anothers Chance."* 1939-40. Guidance, education, recreation, vocational training, sheltered employment from Institute for the Crippled and Disabled, 400 First Avenue, New York City. 800 feet. Sound. Transportation and insurance. National Society for Crippled Children, Elyria, Ohio.
3. *"Vocational Service."* Sound—color. California Department of Public Instruction, Library and Court Building, Sacramento, California.

Mental Disease

1. *"Habit Training."* O.T. at St. Elizabeth's. 16 mm. Colored. Postage one way and insurance. 18 min-

utes. Professional only. Mrs. Arvilla D. Merrill, St. Elizabeth's Hospital, Washington, D. C.

2. *"Recreational Activities at Shepherd and Enoch Pratt."* 2000 feet. Black and white, and colored. Mrs. Marshall Price, Shepherd and Enoch Pratt Hospital, Towson, Maryland.
3. *"Field Day Activities for Mental Defectives."* 16 mm. No charge other than postage. Approval of superintendent for each showing. Mrs. Dorothy P. Dilcer, Chief O.T., Newark State School, Newark, New York.
4. *"O.T. Activities at State Hospital for Mental Diseases, Howard, Rhode Island."* Part colored and black and white. 16 mm. 200 feet. Limited display only. Miss Celestina H. McCullough, State Hospital for Mental Diseases, Howard, Rhode Island.
5. *"Mental Cases."* Slides. 100-200 feet. Miss Susan Colston Wilson, Brooklyn State Hospital, Brooklyn, New York.

Tuberculosis

Local Tuberculosis and Health Associations have many excellent films and free literature on treatment of tuberculosis.

Cardiac Disease

"Heart Disease." 16 mm. Black and white.

Special Service

1. The Bettman Archive, 215 East 57th Street, New York City, New York.

   This is a collection of thousands of photo prints ready for reproduction, either as book illustrations or stills for teaching, or other purposes. The range of subject matter is almost incredible. A few of the subject headings will give an idea of how valuable this archive might be to anyone wishing to prepare a lecture or book in which any historical background is contemplated.

   Medical equipment, textiles, transportation, alchemy, catastrophes, costumes, dress, entertainment, experiments, games, graphic arts, hair dressing, hospitals, toys, travel, theatre, etc.

   Mr. Bettman's rates are $1.50 for the loan of each print from which the reproduction is to be made. The borrower is responsible for the return of the print in good condition.
2. Smithsonian Institute. Slides on New Professions for Women. Smithsonian Institute, Washington, D. C.
3. Society for Visual Education, Inc., 100 East Ohio Street, Chicago, Illinois.

   Kodachrome Library, Catalogue. 2"x2". Color Slides. Cardboard ready mounts. SVE binders mounted between glass. 50c and 60c each.
4. Catalogues: The Sciences; The Social Studies; The Arts (architecture, paintings, sculpture, landscape, gardening, crafts); The Beale Collection.

Samples:

Ea 1 Resorts Modern Woodmen Sanitorium, Cottages for Ambulatory Tuberculosis Patients, Woodmen, Colorado.
Kd 61 Artery, Vein and Nerve.
Kd 19 Cerebellum Gold Chloride Showing Purkinje Cells.
Kd 18 Cerebellum H and E.
Kd 24 Cerebrum Golgi.
Kd 75 Entire eye showing entrance of optic nerve.
Kd 12 Fetal Skull Section.
Kd 60 Heart Muscle.
Kd 76 Inner Ear, Organ of Corti.
Kd 55 Lung.
Kd 56 Lung Injected.
Kd 26 Medulla Oblongata, Cajal, Decussation of Pyramids.
Kd 27 Medulla Oblongata, Cajal, Olivary Nucleus.
Kd 59 Muscle and Tendon.
Kd 28 Muscle Nerve Endings.
Kd 20 Nerve C's Showing Fibers in Bundle.
Kd 17 Nerve Cell, Gold Chloride.
Kd 22 Neuroglia, Gold Chloride Impregnation.
Kd 29 Optic Nerve, Gold Chloride.
Kd 23 Spinal Cord, Ventral Horn Cells.
Kd 25 Spinal Cord, Weigert Whole Section.
Kd 58 Smooth Muscle.
Kd 27 Striated Muscle.
Kd 89-94 Extensive burn both eyelids, following first repair, eye following second repair.
Kg 37 Maculo O.P.
Kg 45 Opacity O.S.
Kg 9 Pneumonia, Lung.
Kg 8 Tubercular Lung, Giant Cells.

5. American Film Center, Donald Slessinger, Director Rockefeller Center, New York City, New York.

REHABILITATION REPORT

It is reported by the Office of Vocational Rehabilitation that more than 1,400 blind persons were trained and placed in employment under the State-Federal vocational rehabilitation program during the 1946 fiscal year.

The majority of placements of blind persons was in industrial work; next in number were businesses, such as vending stands and neighborhood stores; followed by clerical occupations.

The total yearly income of this group of rehabilitated blind persons rose from $372,286, before rehabilitation, to $1,698,944 after rehabilitation. Those are dollar and cents values, but the social values to the rehabilitated individuals and the community cannot be measured in terms of an entry in a financial record.

THIS
IS
CORONADO

This air view of Hotel del Coronado and San Diego Bay shows the beauty of the locale for our 1947 annual Convention. Perhaps this will stir all O.T.'s to make their plans now to attend this meeting.

National Odd Shoe Exchange

Ruth C. Rubin, O. T. R., of St. Louis and her National Odd Shoe Exchange were given appreciative news column recognition in the New York Times of Dec. 7 in which an article reported that 16 per cent of those persons who have registered with the exchange have found opposites and are exchanging shoes.

Miss Rubin conceived the idea in 1943 when the cumulative effects of her own requirements for shoes of different sizes made it necessary to dispose of unwanted odd shoes. She wrote to a number of medical societies, hospitals, the National Foundation for Infantile Paralysis and other organizations interested in persons requiring shoes for different sized feet or only single shoes. The response was almost immediate, and she now maintains an exclusive file in which is recorded the name, age, sex, shoe size and types of shoes available or desired.

In its beginning, Miss Rubin financed the Exchange on her own. Recently the National Foundation for Infantile Paralysis has offered to underwrite a portion of the program, and with this aid, she plans to extend it. Toughest problem yet is finding an opposite for an ex-infantryman from Virginia whose feet were frozen in service. He has available a size 13½ EE.

Civilian Program at Bellevue

Coordination of advances made during the war in convalescent and rehabilitation techniques for veterans has for the first time been made available to disabled civilians with the inauguration of a program in Bellevue Hospital, Jan. 1.

The program includes physchological and vocational training to prepare patients to return to their old jobs or to new ones. It will eventually be enlarged to cover a special 600-bed hospital for rehabilitation and chronic diseases and occupy a building in the New York University-Bellevue Hospital Medical Center when it is completed, as part of the projected Institute of Rehabilitation and Physical Medicine.

Included in the program will be physical medicine, physical therapy, physical education and occupational therapy, as well as a social and educational training program.

SHOP HINTS

Discarded X-ray film, when cleaned with ammonia, a strong soap solution and very hot water, can be used to make small Celluloid Engravings.

H. C.

Hectographing on cloth has proved to be a quick and effective means of preparing embroidery work. By using hectograph ink (not pencil) as many as 40 clear copies may be made in a morning.

G. E. K.

PROJECT: STENCILLED TIES

Equipment used:

Knife to cut stencil		Tile or piece of glass
Stencil brushes	45c each	Stencil board
Palate knife	30c	Pins

Materials used:

Tie	Stencil paper
Prang textile paint, 1 oz. jar 35c	Rags
(Baders	Paper towels
(Spies-Bradburn	Turpentine
(Blackwell-Wielandy	Vinegar

Steps in process:

Rip seam of tie.
Lay flat on stencil board and pin down.
Place stencil in desired position and pin down.
Stir paint with palate knife and place small amount on tile or piece of glass. Thin with extender if necessary.
Dip brush in paint from tile and dab on tie.
Allow to dry.
Press design with cloth dipped in vinegar.
Press tie and sew up again.
Clean brushes and tile with turpentine.

O. T. Department, Washington University
Department of Neuropsychiatry

The Occupational Therapists of Missouri have mimeographed certain project material presented at its meetings. These may be obtained for $.10 per sheet from Miss Gene E. Kundermann, Secretary, Occupational Therapists of Missouri, O.T. Department, City Hospital, 1515 LaFayette, St. Louis, Mo. Send stamped, self-addressed envelope to accompany request.

The Chattahoochee Cover Club—A Therapeutic Activity
Names of Towns and Cities to Illustrate Above Project
Stencilled Ties (as described in this issue)
Silver Plating (as described in February issue)
Tin Pitcher (even if the editor was once a *silver* designer, this looks good! Modern and simple.)
Ironing Board Table
Billfolds and Belts made of Plastic Lacing

LETTERS

Dear Editor:

Please accept my heartiest congratulations for the successful launching of the *American Journal of Occupational Therapy*. Your layout is excellent and the whole magazine presents a fresh clean-cut appearance which I like very much. Your reader interest I am sure will be high judging from your articles and the material in your various divisions.

Mildred Elson
Executive Secretary of the
American Physiotherapy Association

Dear Editor:

I'm bursting to tell you that the whole *Journal* needs a note of comment—the meaty articles, the separate divisions—and the cover is so artistically arranged that it looks like a starched white O.T. uniform with the insignia on its sleeve. It shows the result of a good deal of work and planning from each editor and from you for the splendid organization. My orchids to you all!

Mary S. McCann, O.T.R.
Saint Paul 5, Minnesota

Dear Editor:

I want to congratulate you on the new *Journal of Occupational Therapy*, and wish you all the best of success in the future. The articles are interesting, the whole arrangement—cover with color and table of contents, helpful notes, etc.—are all excellent and thoughtfully planned. It was a joy to receive it and to look forward to reading it all.

Emmy Sommer, O.T.R.
Chief Occupational Therapist
Army Service Forces, Washington, D. C.

Dear Editor:

In reference to the question contained in the Clinic Column of the February issue, "Do other therapists find psychiatric diagnoses of value in planning treatment?" my answer is "Yes, yes, yes!" How can you become more scientific in your choice of crafts and occupations, how can you learn from past experiences, how can you help in diagnoses, and how can you intelligently discuss a patient's problems, without a starting point? The diagnosis is just an efficient summary of the patient's problems—to be sure, *more* should be known and studied, but the prescription, to be of any value, should prepare the therapist in advance, so that unfortunate blunders or waste of time will not occur on first approach.

Sarah Ziegler Bardin, O.T.R.

BOOK REVIEWS

A DESCRIPTION OF APHASIA

"In theory, aphasia may be classified into two types: perceptive and expressive. In perceptive aphasia the patient has lost the power to understand language—either spoken or written or both. He hears what is said, sees what is written, but he does not understand it. The situation may be roughly compared to the experience of a normal person who is unable to comprehend an unknown foreign language in spoken or written form. The aphasic person has that problem with his own language. In expressive aphasia the patient has lost the power to express himself by means of language. He is not able to write or to speak. His difficulty in expressing himself may be caused by the fact that he cannot think what to say or to write, or by the fact that he cannot think how to say the words or how to write them. Actually, most aphasics have some difficulty both in understanding and in expressing themselves." (From *Aphasia in Adults* by Ollie L. Backus, Ph.D., Assistant Professor of Speech and Acting Manager of the Speech Clinic of the University of Michigan.)

SPEECH CORRECTION FACILITIES AND CONTRACTIONAL ARRANGEMENTS AVAILABLE THROUGH THE VETERANS' ADMINISTRATION

Under Public Law No. 16 (78th Congress): Contractual arrangements can be made with institutions qualified to teach this subject. Contracts may also be made with competent private instructors who have suitable clinics.

Under Public Law No. 346 (78th Congress): Speech correction may be elected as a course of choice at a college which has been approved by the appropriate state agency.

Veterans' Administration facilities at the following addresses have been designated by the Medical and Hospital Service as speech correction centers:

Brecksville, Ohio	Minneapolis, Minn.
Bronx, N. Y.	Palo Alto, Calif.
Dallas, Texas	Washington, D. C.
Hines, Ill.	West Roxbury, Mass.
Los Angeles, Calif.	Wichita, Kansas

(This information was taken from an article by Wm. B. Peacher entitled *Speech Disorders in World War II. V. Organization of a Speech Clinic in an Army General Hospital* appearing in the Journal of Speech Disorders, Sept., 1946. Current information may be gotten by addressing Dr. D. W. Morris, Sec.-Treas., American Speech Correction Assoc., Indiana State Teachers' College, Terre Haute, Indiana). **E. A.**

Books and Things. LEWIS GANNETT. Excerpts from an article published in the N. Y. Herald Tribune, December 12, 1946.

Hector Chevigny, radio script-writer, said good-bye to his wife in the Los Angeles Union Station early in November, 1943, came to New York to seek his fortune, and promptly went blind. Totally blind. Three operations in two months proved it hopeless. It annoyed him. He wasn't the resigned or resigning type. Before his wife saw him again (five months after separation) he had learned to read Braille, to type by touch, and was a graduate of the Seeing Eye, a good man with a dog. He tells about it, angrily, in a good book with a terrible title, "My Eyes Have a Cold Nose" (Yale, $3).

Resignation is the last thing a blind man should learn, says Mr. Chevigny. The blind never starve. Society can be rough on the poor, the lame, the deaf or on minority races. It shells out money gladly—and dumbly—for the blind. In some states society grants the blind man a pension, regardless of his ability to earn a living. It condones his sense of helplessness, if he has it. It thrusts aid on him viciously. There isn't a place in America where a blind man can pay to learn Braille; he has to take it free. Charitable organizations will gladly teach him basket-weaving and broom-making in segregated shops which accentuate his sense of separation from the world. But what a blind man needs to learn is to go it alone—they do not teach him.

The Seeing Eye, one institution for which Mr. Chevigny has unqualified praise, insists on its students paying for their training and their dogs, and investigates to make sure that they are really paying. It objects to charity. Every one about the place has passed a month blinded, wearing a black mask. They know their stuff. In particular, they understand that it's easier to train a dog than to train a man. The Seeing Eye trains men—and women— to work with dogs.

In many ways Mr. Chevigny is an abler man today than he was before he went blind. His posture is better. He enunciates more clearly. He uses his nose better, and also his ears. His fingers are more sensitive.

This book is provocative reading. It will be a heady tonic to anyone blind or going blind. You and I, who read it with good eyes, will never again move an ash tray while talking to a blind smoker, or be quite as uselessly "helpful." And in the well meaning institutions and organizations for the blind against which Mr. Chevigny vents his bitterest indignations it ought to start a revolution. It should do for them what Clifford Beers' "A Mind That Found Itself" and Mary Jane Ward's "The Snake Pit" began to do for mental hospitals; something of what Franklin D. Roosevelt's example and publicizing of Warm Springs did for paralytics. It intensifies your awareness of your own gift of sight, and your curiosity about your neglected senses of touch, smell and hearing. E. H.

1 out of 3. American Heart Association, February, 1947.

This report by the American Heart Association points out that one out of every three deaths in the United States is due to diseases of the heart and blood vessels. It summarizes pertinent information concerning the disease of the heart and circulation and presents a program which indicates what can be done, what must be done and why financial support is essential.

For the Occupational Therapist who needs some up to date factual information, this report would be very helpful. For those who are not familiar with the program of the American Heart Association, this presents a concise and accurate outline of their research, establishment of standards, their educational, public health and industrial programs. The American Council on Rheumatic Fever is fully described. S. S. B.

The Head, Neck and Trunk—Muscles and Motor Points. DANIEL P. QUIRING, Ph.D., Head of the Anatomy Division, Cleveland Clinic Foundation and Associated Professor of Biology, Western Reserve University, Cleveland, O. Octavo, 115 pages, with 103 illustrations, published 1947. Cloth, $2.75.

This book was designed as a companion volume to the author's "The Extremities." As in the earlier book, its purpose is to portray in diagrams and condensed descriptions the striated muscles of the body. It offers an exact account of the skeletal attachments, nerve and chief arterial supply, and functions of these muscles.

"The Extremities" will be of more value to the average occupational therapist than this text, but the trunk and neck muscles sections will be useful to the therapist in an orthopedic department.

Baillière's Synthetic Anatomy. J. E. CHEESMAN. Distributed by Clay-Adams Company, Inc., N. Y. C. Fourteen Parts—$1.50 each; complete set $18.00.

Synthetic, so says the dictionary, means "the formation of a compound by uniting its elements." True to its name, this series shows the formation of the body by uniting its structural elements. This is visual material that is different. The entire body is covered in a series of 14 booklets each picturing a given part from the outside in and out again by a series of transparencies showing its structures layer by layer. Any layer may be studied alone by placing blank paper beneath the transparency, or several layers may be studied together showing relationship of muscles, nerves, vessels and bones by holding transparencies superimposed upon each other to the light. By means of these booklets we engage in armchair dissection, peeling off layer by layer uncovering the structures beneath. An identification key is included with each booklet. They may be purchased singly, in any combination or in a complete set. Ask for the part or parts of the body which you wish to study. S. P. H.

AN INTRODUCTORY BIBLIOGRAPHY FOR APHASIC STUDY

A. Giving an Explanation of pathology and treatment:

DOHERTY, WM. B., and RUNES, DAGOBERT D. *Rehabilitation of the War Injured.* New York, F. Hubner and Co., 1943, pp. 51-114.

GOLDSTEIN, K. *After Effects of Brain Injuries in War.* New York, Grune and Stratton, 1942.

BACHUS, OLLIE L. *Aphasia in Adults.* Univ. of Mich. Official Publication, Vol. 46, No. 59, January 6, 1945. Single copies of this publication have been sent free upon request by the Speech Clinic of the Univ. of Mich.

BERRY, MILDRED and EISENSON, JON. *The Defective in Speech.* New York, F. S. Crofts and Co., 1942, pp. 247-268.

B. Giving a description of hospital aphasic programs:

HUBER, MARY. *Linguistic Problems of Brain Injured Servicemen* (Halloran Gen. Hosp.). Journal of Speech Disorders, June, 1946.

SHEEHAN, VIVIAN MOWAT. *Rehabilitation of Aphasics in an Army Hospital* (Percy Jones Gen. Hosp.). Journal of Speech Disorders, June, 1946.

PEACHER, WM. G. *Speech Disorders in World War II: V. Organization of a Speech Clinic in an Army Hospital* (Mcquire and Brooke Gen. Hospitals). Journal of Speech Disorders, Sept., 1946.

FILM REVIEW

"The Best Years of Our Lives," Academy Award winner for 1946 on eight separate counts, is a picture which every occupational therapist is strongly urged to see.

Of particular interest to our profession is the excellent and unusually accurate portrayal by Sergeant Harold Russell, a bilateral arm amputee of World War II who was trained in the use of his prostheses at Walter Reed General Hospital. Russell had a brief introduction to acting in the Army film "Diary of a Sergeant" but this picture was primarily a panoramic review of successive stages of hospital treatment and was designed for the amputee.

The "Best Years," on the other hand, is an intelligent, humorous, and frequently moving account of the psychological adjustment of war veterans. Starring Frederic March, Myrna Loy, and Dana Andrews, among many others, and introducing Cathy O'Donnell and Harold Russell, the film is deservedly one of Hollywood's top successes. For his natural and sensitive portrayal, Russell was awarded two Oscars, one of them for the best supporting actor of the year. Frederic March received his "Best Actor" Oscar for a comic and dramatic portrayal of the ex-sergeant in the same picture.

To any who are interested in a sincerely human and warm story that does much toward restoring one's faith in the essential potentialities of screen drama, "The Best Years of Our Lives" is recommended without reservations.

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- Manuscripts submitted for publication should not exceed 8,000 words, and should be sent to EDITOR CHARLOTTE D. BONE, Garden Suite, 64 Commonwealth Ave., Boston 16, Mass. Reprints will be quoted on all proofs.
- Address business correspondence to AJOT PUBLISHING CO., Suite 129, 739 Boylston Street, Boston 16, Mass.

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